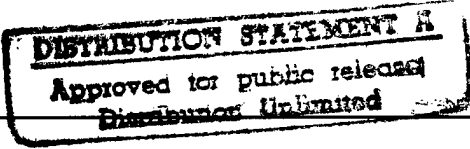


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SYMMETRICAL BEHAVIOR, DECISION MAKING, AND THE QUALITY OF  
SUPERVISOR-PRACTITIONER RELATIONSHIP  
IN US AIR FORCE PUBLIC AFFAIRS

By

Michael M. Pierson, M.A.

The Ohio State University, 1997

Professor Prabu David, Advisor

Grunig and Hunt's Four Models of Public Relations categorizes public relations from the most-manipulative one-way asymmetrical model to the most-mature two-way symmetrical model. While Grunig and others have altered the models in recent years to encompass a continuum of practice, there is little empirical evidence supporting them as positive models of public relations practice.

This study used the ideal of symmetrical public relations to evaluate public relations decision making in the United States Air Force. However, the study adopted the viewpoint that public relations practice is a series of individual choices that each lie along a continuum from total one-way asymmetry to perfect two-way symmetry.

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Besides exploring decision-making behavior itself, this study also examined the possible effects Quality of Leader-Member Exchange, experience, gender, and other demographic factors may have on decision making. Quality of Leader-Member Exchange had a significant effect on decision-making in a few instances and provided some evidence of protective behavior in those subordinates who had better quality relationships with their supervisors. The study found that, in general, women reported a significantly lower Quality of Leader-Member Exchange and had significantly less experience than their male counterparts. However, gender and experience had few significant main effects on utility.

Utilities for symmetrical practice varied between the three scenarios. Results show that practitioners found it reasonable to employ asymmetric communication techniques to achieve symmetric goals and vice versa. This evidence supports a mixed-motive theory of public relations where practitioners may draw on a vast number of variables when making decisions instead of practicing one consistent strategy toward all publics.

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SYMMETRICAL BEHAVIOR, DECISION MAKING, AND THE QUALITY OF  
SUPERVISOR-PRACTITIONER RELATIONSHIP  
IN US AIR FORCE PUBLIC AFFAIRS

A Thesis

Presented in Partial Fulfillment of the Requirements for  
the Degree Master of Arts  
in the Graduate School of The Ohio State University

By

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## ABSTRACT

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Dedicated to my family

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## TABLE OF CONTENTS

	<u>Page</u>
Abstract .....	ii
Dedication .....	iv
Acknowledgments .....	v
Vita .....	vi
List of Tables .....	ix
List of Figures .....	x
 Chapters:	
1. Introduction .....	1
2. Concepts .....	5
2.1 Public relations practice and the two-way symmetrical model.....	5
2.1.1 The four models of public relations .....	7
2.1.2 Ethical claims for symmetry .....	9
2.1.3 Practical claims for symmetry .....	11
2.1.4 A mixed-motive approach .....	12
2.1.5 A new way of looking at symmetry .....	15
2.2 Decision theory and public relations.....	16
2.3 Leader-member exchange .....	17
2.4 Decision making in US Air Force public affairs .....	21
2.4.1 Military culture and public relations environment .....	22
2.4.2 Utility in Air Force public affairs decision making .....	24
2.5 Research questions .....	25
3. Method .....	30
3.1 Survey instrument .....	30
3.1.1 Measuring utilities through conjoint .....	30

3.1.2	Building choice situations .....	31
3.1.3	Measuring LMX .....	36
3.2	Survey frame and sample .....	36
3.3	Pretesting .....	38
3.4	Fielding the survey .....	38
4.	Results .....	40
4.1	Sample .....	40
4.2	Demographics .....	41
4.2.1	Experience .....	41
4.2.2	Gender .....	41
4.2.3	LMX .....	41
4.2.4	LMX and Gender .....	42
4.2.5	LMX and Experience .....	42
4.3	Utility in responses to public affairs scenarios.....	42
4.3.1	Examining Utilities.....	43
4.3.1.1	Media scenario .....	46
4.3.1.2	Community relations scenario .....	48
4.3.1.3	Internal scenario .....	51
4.3.2	Across-scenario relationships .....	54
5.	Discussion and Conclusions.....	50
5.1	Media scenario .....	56
5.2	Community relations scenario .....	57
5.3	Internal scenario .....	58
5.4	Analysis of findings by research question .....	60
5.4.1	Research question 1: Is utility consistent? .....	60
5.4.2	Research question 2: Experience's effect on utility .....	64
5.4.3	Research question 3: Gender's effect on utility .....	64
5.4.4	Research question 4: LMX effect on utility .....	64
5.4.5	Research question 5: Do respondents group together by utility and demographics? .....	65
5.5	Recommendations for further research .....	65
	Bibliography .....	68
	Appendix A: Survey Instrument.....	75
	Appendix B: Correlations with maximum utility models.....	90

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
3.1 Choice matrix, media scenario .....	33
3.2 Choice matrix, community relations scenario.....	34
3.3 Choice matrix, internal scenario.....	34
4.1 Response rate .....	40
4.2 Pearson correlation matrix for LMX-6 items.....	42
4.3 Maximum utility attribute and maximum utility model by scenario .....	44
4.4 Significant relationships by scenario for Experience, Gender and LMX..	45
4.5 Distribution of utility part-worths, media scenario.....	47
4.6 Maximum utility matrix for clusters, media scenario.....	48
4.7 Cluster demographics, media scenario.....	48
4.8 Distribution of utility part-worths, community relations scenario.....	49
4.9 Maximum utility matrix for clusters, community relations scenario.....	51
4.10 Cluster demographics, community relations scenario.....	51
4.11 Distribution of utility part-worths, internal scenario.....	52
4.12 Maximum utility matrix for clusters, internal scenario.....	53
4.13 Cluster demographics, internal scenario.....	54

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
2.1 <i>Purpose and Direction</i> dimensions of the four models of public relations.....	7
2.2      Four models of public relations placed on two continua .....	8
2.3      Continuum of games: zero-sum, mixed motive and coordination.....	13
2.4      New model of symmetry as two-way practices .....	14
2.5      Factors influencing public relations practice in US Air Force Public Affairs .....	29
4.1      Attribute salience, media scenario.....	46
4.2      Attribute salience, community relations scenario.....	49
4.3      Attribute salience, internal scenario.....	52

## CHAPTER 1

### INTRODUCTION

The practice of public relations is as varied as public relations practitioners themselves. Originating in the early part of this century, public relations began from purely manipulative communications practices that sought to better align public attitudes with those of powerful organizations (Ewen, 1996). Today, however, there is an ongoing debate among practitioners who hope that public relations will move beyond the manipulative stage to be the catalyst for honest, open, dialogue between publics and organizations.

One of the leading theoretical models for this evolution of public relations behavior comes from Grunig and Hunt (1984). The Four Models of Public Relations are assumed to be normative models of current public relations practice. The models categorize the overall practice of public relations from the most-manipulative asymmetrical model to the most-mature two-way symmetrical model. Implicit in the discussion of the models is the principle that the two-way symmetrical model is the ideal which most practitioners should strive for. While the models are tidy, they have been criticized by researchers (e.g. Cancel, Cameron, Sallot & Mitrook, 1997) who find the two-way symmetrical model to be extremely rare in practice. There seems to be, as yet, no perfect model that best captures public relations practice.



This study is an attempt to develop a decision-theory approach to model public relations actions by drawing from the work of other scholars (e.g. Murphy, 1991; Dozier, J. Grunig and L. Grunig, 1995, Plowman, 1996). The model was tested by examining how public affairs practitioners in the US Air Force make decisions when presented with challenging situations involving the media, the community and the internal public. Specifically, this study allowed the trade-off between symmetrical and asymmetrical practice, one-way and two-way communication, and the context involved during a practitioner's decision-making by simulating life-like situations in a dynamic choice environment.

Air Force public affairs practitioners form an interesting group for study because of the long history of military public relations activities. The federal government was one of the first organizations to use public relations when it attempted to build and maintain support for American involvement in World War I (Ewen, 1996). Since that time, the military branches have built the nation's largest public relations apparatus with thousands of military and civilian employees (Morgan, 1986). The scope of this effort is not surprising, considering the immense size and influence of the United States military.

The Air Force itself has over 1,400 (L. Wayman, personal communication, August 20, 1996) full-time employees in public relations which in the Department of Defense is called Public Affairs. Some of these public affairs practitioners hold positions equivalent to corporate public relations executives while others hold jobs similar to newspaper

staffers or broadcasters. Almost all receive their initial training at the Defense Information School alongside public affairs personnel from the other military branches.

Despite the standardized training each practitioner receives, different practitioners make different decisions. This is the central theme of this study. It is likely, as critics of the four models have charged (e.g., Miller, 1989; Cancel et. al, 1997), that individual experience and individual situations influence individual decisions.

In addition to individual level demographic variables such as experience and gender, one important individual difference with an influence on decision making may be the quality of the relationship practitioners have with their immediate supervisors. The military culture puts a high value on rank and the chain of command. It seems likely that the quality of superior-subordinate relationship would greatly influence public affairs decision-making. This study employed the well-tested Leader-Member 6, (LMX-6) scale to measure the quality of the relationship between public affairs practitioners and their supervisors.

The implications of this study extend to public relations practice and theory. There may also be implications for public relations ethics, which some (Pearson, 1989b; J. Grunig, 1992) have equated with two-way symmetrical behavior. In the practical realm, this study sought to explore public relations decision making and how leadership relationships might affect the decisions made by individual public affairs practitioners in the US Air Force.

In sum, the purpose of this study was to study decision-making among Air Force public affairs practitioners by presenting public relations scenarios through a computer-

administered study. Conjoint analysis, a widely-used technique in marketing research, was used to examine the utility placed on short and long-term purpose, and communication by public affairs personnel when making public relations decisions.

## CHAPTER 2

### CONCEPTS

#### 2.1 Public relations practice and the two-way symmetrical model

Public relations historians trace the evolution of the profession in the United States to the nation's early history where women may have practiced public relations along a symmetrical model (L. Grunig, 1989). Goldman (1948) described two eras in public relations; "the public be fooled" era and the more modern "the public be informed" era. Cutlip and Center's popular textbook (1952, 1971) also distinguished between one-way and two-way communication.

It was Grunig & Hunt (1984), however, who added the dimension of *purpose* along with the dimension of communication *direction* to the study of public relations. Their *Four Models of Public Relations* categorized public relations activities along a historical continuum from the earliest and least mature *press agency/publicity* model to the most recent and most mature *two-way symmetrical* model. The four models have been widely studied, supported and criticized in the intervening years (J. Grunig & L. Grunig, 1992).

Direction is the attribute that describes the predominant communication technique a practitioner uses. The two dimensions of this variable are *one-way* and *two-way* communication. Pearson (1989b) linked two-way communication with *dialogue*, a

concept with a long history and high ethical value in communication. He connected dialogue with notions of honesty, open-mindedness, and empathy.

In contrast, one-way communication is characterized by deception, exploitation, distrust and self-defensiveness. Total one-way communication lacks mutuality and is marked by manipulation and deceit, "using" the other person to achieve one's goals.

Direction may also highlight the effect of organizational culture on the techniques practitioners use. A particular organizational culture, for example, may not value two-way communication. The organization's dominant coalition selects a public relations model based upon "whether that model fits with organizational culture and whether the public relations director has the expertise to carry out the model" (J. Grunig, 1989, p. 31). This may explain why, for example, the *public information* model has been found to dominate government public relations (Grunig & Hunt, 1984).

*Purpose* is the attribute that describes the goals of public relations communication. Purpose examines whether the practitioner is advocating his or her organization's viewpoint or if the practitioner attempts to accommodate his or her organization's position toward the public's position (J. Grunig & L. Grunig, 1992). One dimension of purpose is pure *symmetry* where practitioners are willing to go to almost any length to adjust their organization's viewpoint to reach agreement with a particular public. Cancel et. al. (1997) referred to this as *accommodation*. It is characterized by empathy for the viewpoint of the public, without which there cannot be rapport through communication (Cutlip & Center, 1971). Opposite to symmetry is *asymmetry*, where the goal of public relations is to convince a public to accept the organization's viewpoint.

### 2.1.1 The four models of public relations

Grunig and Hunt (1984) used the direction and purpose attributes to build their four models of public relations (Figure 2.1). The *press agency/publicity* model is the stereotypical public relations hucksterism that seeks to gain public attention at almost any cost. In the *public information model*, public relations often is practiced by a journalist-in residence, “whose job it is to report objectively about his organization to the public” (Grunig, 1989).

<u>Purpose Dimension</u>	<u>Direction</u>	<u>Dimension</u>
	One-way communication	Two-way communication
Symmetric Purpose	Public Information Model	Two-way symmetrical Model
Asymmetric Purpose	Press Agency Model	Two-way asymmetrical Model

Figure 2.1: *Purpose and Direction Dimensions of the Four Models of Public Relations From Grunig and Hunt (1984)*

Though J. Grunig originally categorized this model as a one-way, symmetrical model, he later backed away from this position (J. Grunig, 1992) placing press agency near the “Journalism” end of a continuum he called “Craft Public Relations” with the press agency/publicity model nearer to “Propaganda” on the other end (Figure 2.2). One-way communication dominates craft models where practitioners “seem to believe that their job consists solely of the application of communication techniques as an end in itself” (J. Grunig, 1992, p. 312).

### *Craft Public Relations*

---

Propaganda			Journalism
Press agency model			Public information model

---

### *Professional Public Relations*

---

Asymmetrical			Symmetrical
Two-way asymmetrical model			Two-way symmetrical model

---

Figure 2.2: Four models of public relations placed on two continua  
From J. Grunig & L. Grunig (1992), p. 312.

Practitioners of professional public relations, in Grunig's model, see their job as having a strategic purpose for the organization to manage conflict and build communication with publics. These practitioners use two-way communication techniques. The *two-way asymmetrical model* takes advantage of research to affect changes in attitudes among target publics. This model encourages feedback from target publics and uses social science theory. However, its purpose is one-sided with an emphasis on persuading publics to fall in line with the organization's views. In essence, the two-way asymmetrical model is an advanced form of the press-agentry model.

The most-mature model and a sign of excellence in public relations (J. Grunig, 1992; Dozier, et. al. 1995) is the *two-way symmetrical model*. In this model, public relations acts as a mediator between the organization's *dominant coalition* (the organization's most powerful leaders) and the public. This model also uses social science theory, but it strives for mutual understanding between an organization and its

publics. J. Grunig and L. Grunig (1992) claimed this model, though rare in practice, is the most effective model for most organizations.

### 2.1.2 Ethical claims for symmetry

J. Grunig & L. Grunig (1992) also claimed that the two-way symmetrical model represents an ideal for ethical public relations behavior. They insist this model overcomes *ethical relativism*, the view that there are no objective moral standards but only individual, often self-serving, perceptions of right and wrong (Pearson, 1989b). The two-way symmetrical model, however, sets up an environment in which both the organization and its publics have equal power and all communication channels are open and used. "As long as the dialogue is structured according to ethical rules, the outcome should be ethical -- although not usually one that fits the value system of any competing party perfectly" (Grunig & Grunig, 1992, p. 308).

Pearson (1989b) also praises symmetrical communication which he claims overcomes internal disagreements about whether the policies being communicated are right or wrong. Pearson's argument is that "some ways of communicating are more ethical than others" (p. 70). He argues that two-way symmetrical communication, involving a formal set of communications rules, is an ideal route to conflict resolution. He used this reasoning to put forward a theory that "ethical public relations practice is more fundamentally a question of implementing and maintaining interorganizational communication systems that question, discuss and validate ... substantive ethical claims" (Pearson, 1989b, p. 82).



J. Grunig (1989) criticized the asymmetrical worldview of many organizations who "assume that if dissident publics had 'the big picture' or understood the organization, these publics would willingly 'cooperate' with the organization" (p. 32). J. Grunig and L. Grunig (1992) argued that the asymmetric models now dominant in public relations have been used to justify almost any action. Furthermore, Dozier (1989) claimed that the two-way symmetrical model was the only model "inherently consistent with the concept of social responsibility" (p. 5).

Olasky (1987) and Gandy (1982) completed critical studies supporting the argument that the field of public relations today is unethical due to the prevalence of the asymmetrical model. Olasky's critical study of public relations painted a picture of American industry pursuing this asymmetric direction when they choose to lobby governments or mount elaborate campaigns to persuade the public the organization is trustworthy and deserving of public support. Gandy (1982) equated information with commodities. As the demand for information increases, so does its value. Public relations, in Gandy's Marxist viewpoint, acts to control valuable information and hence support the hegemony of the dominant group.

Others have opposed symmetry's claim to moral superiority. As ethical as it may appear, purely cooperative behavior has been shown to lead to morally questionable outcomes, such as racial segregation in housing (Murphy, 1991) or repressive societies (Carling, 1989). Cancel et. al. (1997) argued that symmetry is an ethical norm only if both parties find each other morally acceptable. Accommodating or engaging a morally

repugnant public might be considered unethical. This is a critical dilemma for those seeking an ethical norm for public relations.

Another dilemma central to the ethics debate in the public relations profession is the practitioner's role as "special pleader" for the organization (Bernays, 1928). Sallot (1993) argued that practitioners can be mediators when both sides of a conflict have common interests, but that they can not be expected to argue neutrally for conflicting interests. She asserted, therefore that the two-way symmetrical model is unworkable.

### 2.1.3 Practical claims for symmetry

Besides their ethical claims for symmetry, J. Grunig and L. Grunig (1992) also called the two-way symmetrical model the most effective. However, most of their evidence for this claim comes from studies that examined organizations that did not practice this model. For example, L. Grunig (1986) found that none of the other models reduced conflict with activist groups. Childers (1989) and Kelly (1989) found that asymmetrical models failed to contribute to an organization's goals or the public interest. Turk (1986) found those government agencies using the asymmetric press agency model were ineffective in getting agency viewpoints into the mass media.

Attacks on the claim of superiority for the two-way symmetrical model have also centered on its rarity in real-world public relations practice. J. Grunig and L. Grunig (1992) argued that the four models are both normative and positive theories of public relations and that each model can describe what is found in real-world practice. According to them, public relations practitioners do not always practice the model that is

best for their organization and they admit the two-way symmetrical model is exceedingly rare in practice.

Critics of the four models have countered this positive claim. Rakow (1989) wrote that symmetry is rarely found because organizations, at least in the United States, have no motivation to act symmetrically since they hold nearly all the power in this society. Miller (1989) argued that the purpose of public relations is not to promote harmony but to exert an organization's control on its environment. "Effective, ethical persuasion and effective, ethical public relations are nearly synonymous" (p. 45).

However, in pointing out how effective asymmetrical tactics can be, Miller was careful to point out that asymmetrical persuasion can be misused. Two-way communication techniques, for example, may be used to co-opt a vocal opposition group, giving them a forum to speak, but no real power in the decision-making process. Tompkins and Cheney (1985) call this *unobtrusive control*.

#### 2.1.4 A mixed-motive approach

In comparing public relations to classes of games, Murphy's answer to this ethical and practical dilemma was to suggest that purpose be defined along a continuum from Pure Conflict/Zero Sum to Pure Symmetric/Coordination. *Mixed-motive* behavior would fall at some point on the symmetry/asymmetry continuum and relies on balancing the utilities each player assigns to the given situation.

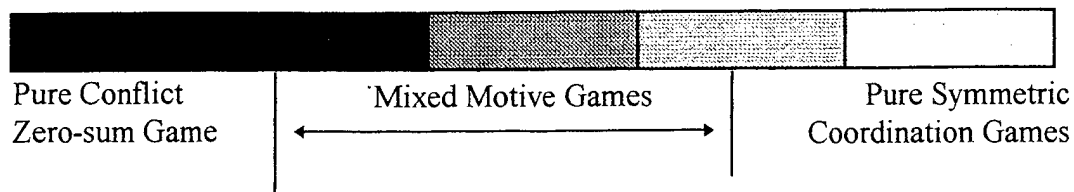


Figure 2.3: Continuum of Games: zero-sum, mixed motive and coordination  
From Murphy (1991)

Most day-to-day public relations interactions are neither purely conflict nor purely cooperative, however. Murphy (1991) points out that “in their role as boundary spanners, public relations practitioners have opportunities to orchestrate the needs of their organization and its constituencies so that both sides can live with the outcome” (p. 122). In other words, most public relations practitioners use a cooperative approach common to a class of games called *mixed-motive games* which lie between zero-sum games and games of pure cooperation.

Most public relations activities, according to Murphy (1991), lie somewhere in the realm of these mixed-motive games where the goal is to settle at some equilibrium point that balances out the interests of the organization and its publics. This is the point where there exists “a balance between the players’ interests such that neither player would have any cause to regret his action given what the other player chooses to do” (p. 125).

In fact, at some levels, conflict may be functional. For example, environmental groups encouraging reduction of landfill use might wish to ban production of plastic bottles. Through negotiation, however, consumers may be encouraged to recycle or reuse

these containers giving environmental groups a path to their goal without eliminating a product. Both sides make some gains and avoid some losses.

Searching for a better refinement on the four models, the Excellence Study (J. Grunig (ed.), 1992) was followed by Dozier et. al. (1995) who proposed a new model for two-way communication based on Murphy's (1991) game theory-based purpose continuum. The Dozier et.al. model helped explain how organizations may use asymmetrical techniques to achieve symmetrical long-term gain and vice versa. This model presents a "win-win" zone where the organization's dominant coalition's position and the position of a public reach a mutually-acceptable symmetric balance. This zone, where mixed motives of both sides lead to a negotiated solution, is the long-term target of excellent programs. In essence, two-way communication becomes the means to achieve the goal of symmetry, unlinking direction from purpose.

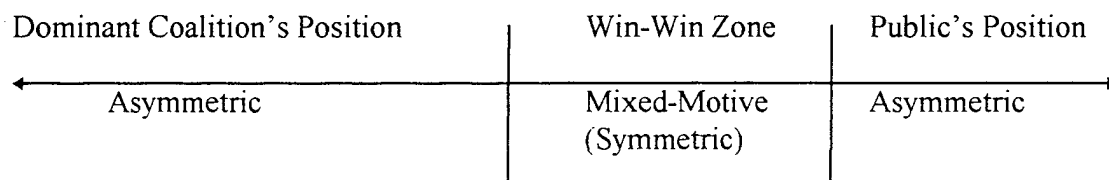


Figure 2.4: New model of symmetry as two-way practice  
From D.M. Dozier, et. al (1995), p. 48.

Cancel et. al. (1997) argue for an even more relaxed, contingency theory of public relations behavior. Their analysis of symmetrical public relations theory found 87 variables that may affect the degree to which an organization chooses to accommodate a particular public. Their model is a continuous scale between pure advocacy and pure

accommodation which accounts for each public relations choice situation instead of broadly characterizing an organization's public relations model. In effect, they argue that public relations practice is and should be flexible to the dynamic environment in which public relations decisions are made. Cancel et. al. and Dozier et. al. (1995) based their work on concepts proposed by other scholars (e.g. Hellweg, 1989) who also suggested a continuum of public relations practice.

#### 2.1.5 A new way of looking at symmetry

The major problem in previous studies using symmetry is the confining conceptualization of the models themselves and the methods used to gather data on public relations practice. Previous studies (e.g., Pollack, 1984; Turk, 1986; Van Dyke, 1989) relied heavily on self-reporting and did not examine how practitioners would actually respond to tough decisions.

The most rigorous study so far, along similar lines to this study, was by Plowman (1996) who used qualitative personal interviews. Plowman's study, comparing the four models to negotiation tactics, found that some asymmetrical tactics are benign and may in fact contribute to long-term symmetrical relationships. He also found that practitioners skilled in different types of negotiation are more likely to be part of an organization's dominant coalition.

This study sought to extend Cancel et. al. (1997) Plowman (1996), Dozier et. al. (1995), and the Excellence Study (J. Grunig, 1992) by using these conceptualizations of a continuum of public relations practice to measure public relations decision making. It accepted the argument that public relations behavior may be conditional, but retains

Grunig's conceptualization of public relations direction and purpose. These two attributes were used to operationalize available choices, as explained in Chapter 3.

## 2.2 Decision theory and public relations

The mixed-motive model of public relations practice is grounded in functionalist criticisms of symmetrical practice as a norm for the profession. It does not, however, go as far as Dover's (1995) criticism in discounting symmetry as a viable strategy for the profession. It assumes that the day-to-day work of public relations practitioners still relies on the art of deciding what combination of symmetrical and asymmetrical direction and purpose might work best in each step of an ongoing relationship with particular publics. The mix of tactics and strategies may well change as the relationship develops.

The question we are left with is: "How do real-life public relations practitioners go about deciding what to do?" What we seek is a positive model. To get there, however, we must accept some grounded normative theory through which to evaluate real-world practice.

Ehling (1984) set out to develop a conceptual framework for normative public relations decision making. Ehling specified four components and three parameters that make up a *choice situation*. The components are: A decision-maker, a course of action, an outcome, and the environment surrounding the decision-maker. The parameters are: *probability of choice*, *efficiency of choice*, and the *relative value of an outcome*. The *choice situation* "requires at least two available courses of action, at least two outcomes that can be ordered preferentially, and an ordered set of efficiencies so that the most efficient course of action can be selected" (Ehling, p. 30).

Ehling went on to consider, in mathematical terms, a one-party system where one party with information produced a message, and a two-party system where information was exchanged. When all the variables in Ehling's equations can be quantified, a "best" choice can be calculated. Of course, if this was possible, a computer program could be designed to make public relations decisions. In the real world, however, there are an almost endless number of possible choices and a complex environment that impact every decision. This study attempted to control as many of these factors as possible.

This study examined the choice situation by presenting a specific group of decision-makers with a limited set of choices, a limited set of possible outcomes, and limited information on the environment. From their responses we can infer the probability they would chose a particular tactic and the value the practitioner places on communication goals. We measured these by determining the utility the respondent puts on each possible choice. What we can not determine is the *efficiency of choice* since we do not know the probability the communication choice will have the desired effect on the target public.

*Utility* quantifies the salience of certain factors for each decision-maker. In game theory terms it represents the "points" for which each player plays. *Utilities* can be quantified through conjoint analysis as will be explained in Chapter 3. These utility scores can then be compared between individuals or groups.

### 2.3 Leader-Member Exchange

Cancel et. al. (1997) proposed 87 variables that may affect accommodation in public relations practice. Two of these were "Open or Closed Culture" and "Corporate



Culture.” One viewpoint on these two variables may be found in the dyadic perspective of organizational behavior. The dyadic perspective can be traced to Chester Bernard’s (1938) *The Functions of the Executive*. Bernard, according to Graen and Scandura (1987), was one of the first writers to claim that organizations, by their nature, are negotiated systems. Successful dyads within each organization work towards a balance between inducements and contributions to carry out the tasks of the organization.

Weick (1979) advanced Bernard’s theory of dyadic organizing by describing the double-interact cycle. In this cycle, action by one party evokes a response by a second party whose actions evoke a response in the first party in a continuing cycle of communication and behavior. Of course, each cycle interlocks with other dyadic cycles, making this a complex phenomenon that permeates the organization.

Graen and Cashman (1975) described the evolution of the leader-member relationship as role making, a series of steps through which each dyadic relationship moves over time. Participants first interlock their behavior in unstructured tasks. Their relationship then evolves in the environment of their organization. Role making, then, “is a set of processes by which a range of collaborative systems emerge based on dyadic transactions involving interdependent sets of inducements and contributions” (Graen & Scandura, 1987, p. 179).

*Unstructured tasks* are those for which there are no organizational instructions. Members rely on their creativity and talents to complete these tasks when their relationship with their supervisor has developed congruent inducements. This is very similar to J. Grunig and L. Grunig’s (1992) definition of professional public relations.

Without these congruencies, subordinates can only carry out tasks for which there is specific guidance as happens in craft public relations, as defined by J. Grunig and L. Grunig.

One popular and well-tested measurement of this dyadic relationship is Leader-Member Exchange Quality (Lee & Jablin, 1995). Leader-member exchange (LMX) usually measures subordinates' perceptions of their relationship with their supervisor though studies have examined the relationship from the supervisor's viewpoint as well. The measurement has been widely used (Grand, Liden & Hoel, 1982; Scandura & Graen, 1984; Seers & Graen, 1984; Graen, Scandura & Graen, 1986; Novak and Graen, 1985). There is also a 12-item Japanese translation of the measure used by Wakabayashi, Minami, Hashimoto, Sano, Graen & Novak (1981) and by Wakabayashi and Graen (1984).

Construct validation has shown LMX to exclude the personal affective aspect of the relationship. It appears that personal relationships with supervisors are "a separate construct and not isomorphic, in relationship to outside variables, with the quality of leader-member exchange" (Graen & Scandura, 1987, p. 191).

Though many supervisors initially report that they treat their subordinates equally (Graen and Scandura, 1987; Lee & Jablin, 1995), a quantifiable difference has been found between members of a supervisor's "in group," those with higher-levels of LMX, and those classified as "out group." The quality of the relationship is reflected in decision making, delegation of tasks, latitude given the subordinate and the innovation of the subordinate.

Graen and Cashman (1975) found that higher-LMX dyads spent more time on unstructured tasks. Schiemann (1977) found that there was much more communication about unstructured tasks in high-LMX dyads. Schiemann and Graen (1987) found agreement within the dyad to be related to the quality of the dyadic relationship. Clearly, communication affects and is affected by the quality of the relationship.

Evidence has shown that subordinates use different maintenance communication tactics according to the supervisor's management style. When the boss is a leader, a situation related to a higher-quality relationship, the subordinate is more likely to use direct, personal influence techniques. In this type of relationship the supervisor considers the subordinate a member of the supervisor's "in-group." These in-group subordinates are more likely to be more productive (Liden & Graen, 1980), more satisfied with their jobs (Graen & Ginsburg, 1977) and less likely to leave the organization (Graen, Liden & Hoel, 1982).

It follows that in-group subordinates may also be more assertive in presenting uncomfortable recommendations to their superior. Since subordinates in higher-quality relationships enjoy more leader attention, support, and sensitivity (Dansereau, Graen and Haga, 1975; Graen & Schiemann, 1978; Liden & Graen, 1980), they may also be more willing to recommend actions that could bring conflict with their supervisor.

In lower-quality, supervisory relationships workers are more likely to use regulative communication techniques (Waldron, 1991). Supervisors in these lower-quality relationships tend to limit their interactions with subordinates to the contractual behaviors formally defined by the organization's definition of authority relationships

(Graen & Schieman, 1978). In such relationships, where workers are considered "out-group" members, supervisors use their organization-granted authority to extract compliance from their subordinates.

Each of the scenarios in the questionnaire presents a threat to the practitioners' organizations and to the practitioners themselves. In such a case, one would expect those who have a lower-quality, contractual relationship with their supervisors to choose the path where the organization takes the least short-term risk (Nutt, 1989; Waldron, 1991; Waldron et al. 1993).

A person with a better-quality relationship, however, has more concern about the success of the supervisor and the organization (Waldron, 1991), is more willing and able to take risks (Waldron, Hunt and Dsilva, 1993) and has a better capacity for negotiation with the supervisor. Less exposed to personal risk, this decision-maker seeks the decision rule that can lead to the highest payoff for the organization (Nutt, 1989). These practitioners should be more willing to recommend a cooperative approach that relies on trust in others outside the organization and usually involves more work for the organization.

#### 2.4: Decision making in US Air Force Public Affairs

The public affairs organization within the United States Air Force is given the task of informing the American public about the roles, missions, and people of the Air Force (AFPD 35-1, 1994). Public affairs practitioners, both military and civilian, hold a wide variety of jobs similar to those found in corporate public relations departments,

broadcast stations and newspapers. Each receives initial training at the Defense Information School and many also receive advanced training in a variety of settings.

#### 2.4.1 Military culture and public relations environment

The military's norms include an expectation that the chain of command will be honored. Within public affairs, for example, headquarters personnel will contact the top public affairs officer at a "field" base outside the headquarters before contacting anyone at that base. Base-level public affairs officers are expected to address only those issues that pertain to their area of influence and leave "big picture" issues to public affairs offices at higher levels of command (Pierson, 1996).

The norms of command authority and responsibility are also strong. Subordinates are legally bound to carry out the lawful orders of their superiors. Status is openly displayed on military uniforms and respect for senior rank is a keystone of military culture. Subordinates are almost totally dependent upon their supervisors for performance reports that are vital to obtaining promotions or pay bonuses.

The military culture also places a high value on uniformity and security. Speeches by senior officers must be reviewed by higher headquarters agencies before being presented, regardless of the topic (AFI 35-205, 1994). Articles meant for publication or public presentation by Air Force employees must be reviewed for possible security and policy restrictions by trained public affairs personnel. All Air Force personnel also receive regular training on protecting government information.

In the years since the Vietnam War, however, more and more media and advocacy groups have challenged the military to become more open in its dealings with

the public. The public's demand for military information has increased along with the military's need for public support. Recent years have also seen intense media coverage of peacetime and combat operations, creating conflicts between the media, the military and the general public.

In this environment, it is not surprising that evidence indicates that Air Force public affairs will practice a public information model, as do most government agencies (Grunig & Hunt, 1984). This model allows the agency to send out information, answer questions posed by the media, and protect a great deal of information by filtering releases through public affairs specialists. Public affairs practitioners are trained as journalists so they may provide newsworthy stories to the press and craft releases in easy-to-use journalistic style.

At least three field studies have found this model in the federal government. Pollack, (1984) found evidence that federal government agencies most often practiced the public information model. Van Dyke (1989) found that although 45 US Navy public affairs officers claimed that the two-way symmetrical model best described their organizations, in practice their work corresponded more to the public information model. In a qualitative study Pierson (1996) also found the public information model used at one Air Force public affairs office.

Thus, Air Force public affairs practitioners face an ongoing dilemma: How to inform the American people about the Air Force while at the same time protecting sensitive information, heeding military rank structure, and promoting personal career goals. Practitioners solve this problem daily by assigning utilities to each of the factors

in their environment and making a choice based on what appears to be the “best” payoff under their utility scheme. This give-and-take negotiation is very similar to a mixed-motive game, as previously explained.

#### 2.4.2 Utility in Air Force public affairs decision making

Utility itself could be a composite of two independent “tugs,” namely, organizational and personal goals. These utilities may be in conflict or in concert. Certain courses of action may greatly damage the organization while greatly benefiting the practitioner, such as is the case when the practitioner will profit from being a whistle blower. Other choices may damage the practitioner to the benefit of the organization, benefit both, or damage both. In any case, the practitioner has a wide assortment of utilities to weigh when making decisions.

This study explored how individuals make public relations decisions while keeping the organizational “tug” fairly uniform and by examining practitioners within one distinct culture. Members of the Air Force public affairs community are an excellent research population due to their homogeneity relative to the vast array of public relations practitioners in the private sector. Public affairs personnel share common basic public relations training, organizational culture and advancement opportunity. We expected this homogeneity would make it easier to discern internal factors, such as LMX, experience and gender, that influence the choices made by individual practitioners by minimizing variance on a variety of external factors.

## 2.5 Research questions

Since this study used a unique technique to examine public relations behavior, it should be considered exploratory research although some predictions could be made from the theoretical foundation presented. Other studies have obtained qualitative assessments or even quantitative data using survey research. However, there are no other reported studies that examined public relations decision making by presenting real-life scenarios that involve trade offs between attributes.

Q1: Do Air Force Public Affairs practitioners have a common, consistent model of public relations practice that guides their decisions? Do they have the same maximum utility model for each scenario, or do they prefer a mixture of communication techniques toward symmetrical or asymmetrical goals depending upon the scenario?

Grunig and Hunt (1984) predicted that government agencies would practice along a public information model, using one-way communication with a symmetric purpose. We should therefore expect to find that the maximum utility matrix for each scenario would be: low communication + high short-term purpose + high long term purpose.

However, we expected, based upon Plowman (1996) and Murphy (1991) to find a more mixed-motive model at work where the maximum utility model differs for each scenario. We expected to find that practitioners value a variety of techniques and goals, depending on their evaluation of the situation. We did not link symmetric purpose with two-way communication, as J. Grunig and L. Grunig (1992) have done. We expected to find that practitioners do not link the two attributes either.



Inconsistencies in utility within and between scenarios would support this viewpoint of a mixed-model of public affairs practice. Symmetrical public relations theory presupposes that practitioners will display some consistency in their symmetrical or asymmetrical behavior from situation to situation. A lack of consistency may indicate that a more relaxed, mixed-motive or contingency model may best describe the practice of this group.

Other studies have encountered social bias toward the normative symmetry model. If results are socially biased, we would expect to find the maximum utility model for each scenario to be high communication + high short term purpose + high long term purpose. We attempted to control for this bias, however, by introducing a mixed level and by presenting realistic choice situations.

It is important to note here that if the Dozier et. al. (1995) model is correct, two-way communication and symmetry may be confounded at the point where pure two-way communication practice exists, long-term symmetry should necessarily develop. Two-way communication is essentially symmetrical, in Dozier's view, because excellent practices are "bounded by a symmetrical worldview that respects the integrity of long-term relationships" (Dozier et. al, 1995, p. 49). *Worldview* is a mindset that frames the way public relations practitioners see the purpose of their work, either to persuade publics in the asymmetrical worldview or to build positive long-term relationships with publics in the symmetrical worldview (Grunig & White, 1992).

Q2: What effect does Experience have on utility for different levels of symmetrical practice?

Q3: What effect does Gender have on utility for different levels of symmetrical practice?

Dozier, et. al. (1995) suggested that in excellent organizations, public relations practitioners play the role of advisors to the dominant coalition, instead of just performing technical roles. In a hierarchical military culture, greater experience usually equates to greater rank and greater access to the dominant coalition. Women, however, have had equal opportunity in the armed force in the past two decades and still make up less than 20 percent of the total force. In addition, Dozier, et. al. found that women in public relations tended to see their role as technicians more so than did men. Obviously, Experience and Gender merit attention as independent variables.

Q4: What effect does LMX have on utility for different levels of symmetrical practice?

LMX seems to provide insight into the organizational environment in which public affairs decisions are made. Since symmetrical public relations behavior seems more likely in organizational cultures that value symmetry (Dozier et. al., 1995), and LMX seems to be related to symmetrical internal communication, we expected that symmetrical behavior would have more value for practitioners who enjoyed high-quality relationships with their supervisors.

Q5: Do practitioners fall into any discernible groups based upon the utility they assign to different levels of symmetrical practice and are there demographic differences that would describe these groups?

After data were collected, it became apparent that it was important to investigate whether there were patterns to the behavior of the respondents and whether or not some demographics would describe the groups. The nature of conjoint analysis, explained in Chapter 3, requires that respondents mentally juggle all the attribute levels simultaneously weighing the trade offs that must be made. Some people will necessarily concentrate on a few highly salient attributes or levels in order to simplify decision making. Any patterns found in this behavior might help predict decision making by particular demographic groups.

Figure 2.5 illustrates the model we will test. We believe organizational, personal and situational factors work together to influence public relations practice and that practice can be examined by determining the utility that practitioners assign to communication direction, short term purpose and long term purpose in different situations.

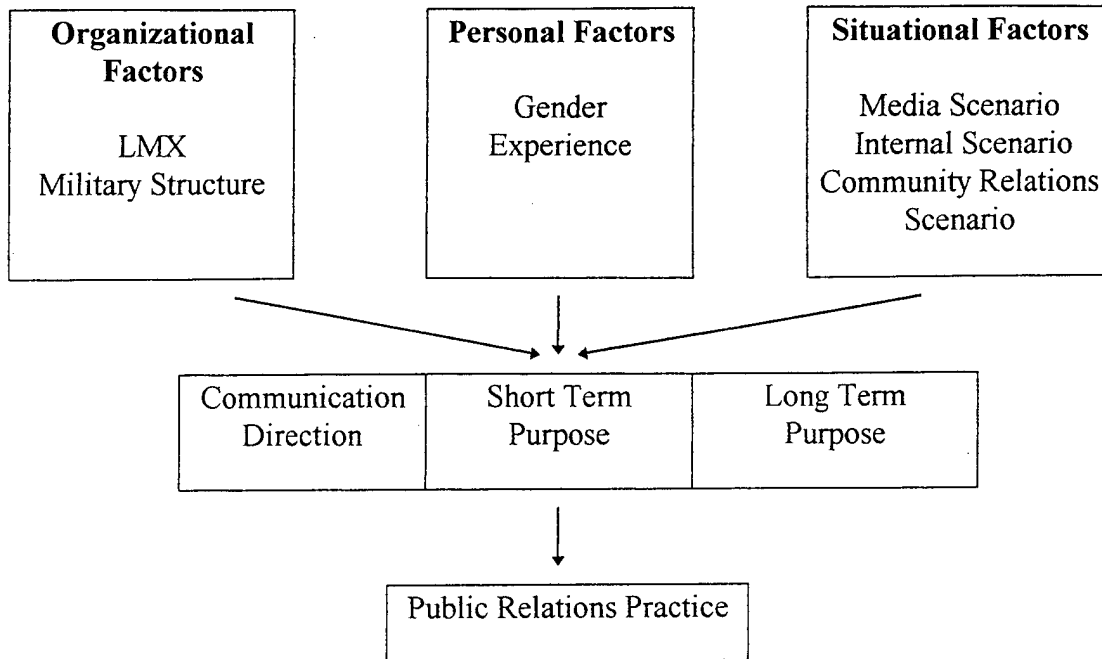


Figure 2.5 Factors influencing public relations practice in US Air Force Public Affairs

## CHAPTER 3

### METHOD

Data were collected through a mail survey of 196 Air Force Public Affairs practitioners between November 3, 1996 and January 15, 1997. The survey received official endorsement from the Air Force Personnel Center and the Secretary of the Air Force's Public Affairs director.

#### 3.1 Survey Instrument

The survey instrument was written using Sawtooth Corporation's CI3 and Adaptive Conjoint Analysis (ACA) interactive interviewing software which is considered one of the industry's leading conjoint analysis programs (Green & Krieger, 1993). The interface is very user-friendly, and appeared to be easy to use for most of the respondents (See Appendix A). Only two respondents reported trouble using the software.

##### 3.1.1 Measuring Utilities through Conjoint Analysis

Conjoint analysis is based on multiattribute utility theory that is supported by prescriptive and descriptive research (Green & Krieger, 1993). Keeney and his associates (Keeney & Raiffa, 1976; Bell, Kenny & Raiffa, 1977) have applied multiattribute utility theory to cases where a small group of key decision makers is faced with high-stake and often high-risk decisions involving broad social and environmental consequences.

Conjoint analysis requires specific choice scenarios, and specific choices (i.e. price or gas mileage) ordered into levels. Researchers set up scenarios and ask respondents to choose from among different combinations of attributes and levels within each attribute.

The ACA program uses fractional factorial design to calculate utilities. The fractional factorial design considerably simplifies the process by dramatically reducing the number of paired-choice scenarios presented to the participant. A fully-factorial design would involve numerous paired-choice scenarios, with considerable risk of response fatigue.

Two important developments that expanded conjoint research were the advent and growing popularity of PC-based research software and the application of conjoint methods to higher-level, strategic decision making. One example of the latter trend is that McKinsey and Company has sponsored over 200 applications of conjoint analysis for high-level marketing and strategic planning uses (Allison, 1989). Booz-Allen, Arthur D. Little, The Boston Consulting Group and Bain and Company are only a few of the large consulting firms using conjoint techniques (Green & Krieger, 1993). Obviously, conjoint is accepted as a valuable tool in marketing decision research and is one of the best methods available for estimating utility.

### 3.1.2 Building choice situations

Three scenarios were constructed, each addressing one of the three major publics that Air Force public affairs is organized to reach; news media, the civilian community and the internal audience. Although these three areas are broad in scope, they provide

insight into whether or not practitioners tailor their decision matrix for different publics.

Each scenario presented respondents with a situation in which they had to make some choice. Information contained in each scenario was limited partially by the capacity of the software, but mainly to allow respondents to project their own organizational environment onto the scenario.

For choices in response to the scenarios, this study used Grunig's (1992) and Plowman's (1996) conceptualization of communication direction, short term purpose and long term purpose. Murphy (1991), Dozier et. al. (1995), Grunig, and Plowman each suggested that public relations behavior may be based on solving the situation at hand, the short-term purpose, and developing or maintaining a long-term relationship with a public, the long-term purpose.

Levels of each variable were developed with the highest levels being the ones which were the most accommodating and could be associated with the most "excellent" PR organizations (Grunig, 1992; Dozier et. al. 1995). Low levels were diametrically opposed to high levels. This study also included a "mixed" level, to help avoid response bias toward the normative model and to give a mixed-motive choice. Mixed levels incorporated a willingness on the part of the organization to communicate or accommodate, but allowed the organization to retain control of the situation or get some payoff.

The media scenario read:

A reporter calls you asking to interview your commander about a recent announcement that your unit's funding will double next year; obviously a "good-news" story. However, there are rumors circulating that your commander in some way threatened a local civilian recently. Your commander refuses to discuss the issue. The reporter admits to you that she knows about the rumors, but promises she's not pursuing them. The reporter has been trustworthy in the past, but has been criticized lately for being too soft on the military.

Attribute	Level	Description
Communication	Low/One-Way	Refuse interview but issue press release on the budget increase.
	Mixed	Grant interview, but insist reporter stay on budget story
	High/Two-Way	Grant an unconditional interview with the commander.
Short Term Purpose	Low/Asymmetric	Try to avoid addressing rumors and hope for a positive story.
	Mixed	Trust reporter to cover only the positive budget story
	High/Symmetric	Trust reporter will write a fair and balanced story
Long Term Purpose	Low/Asymmetric	Present only a positive image of your unit to the public.
	Mixed	Risk occasional bad press to help unit's long-term image.
	High/Symmetric	Build an open, cooperative relationship with the media.

Table 3.1, Choice matrix, media scenario

The community relations scenario read:

You receive a letter from a native-American tribe opposed to your unit's training operations on public land that the tribe considers sacred. Their complaints are due to noise and environmental damage that prevents the tribe from communing with nature. The tribe is very good at rallying public support for their causes and threatens to go public with their complaints. Your unit could move its training out of the area at little cost, but some in your unit complain that the tribe's demands will set a bad precedent. They claim that other people in the training area will also make complaints and demands until all military use of the valuable area is brought to a halt.



Attribute	Level	Description
Communication	Low/One-Way	Send tribe a letter explaining your unit's training operations
	Mixed	Ask tribe for more specifics on their complaints
	High/Two-Way	Organize a meeting that fosters dialogue with tribal leaders.
Short Term Purpose	Low/Asymmetric	Try to get the tribe to drop their demands.
	Mixed	Try to get the tribe to soften their demands and not go public.
	High/Symmetric	Temporarily move training until a public hearing can be held.
Long Term Purpose	Low/Asymmetric	Try to get the tribe to accept that training must go on as is.
	Mixed	Make some concessions, if it will improve your unit's image.
	High/Symmetric	Be willing to adapt your unit's training to the tribe's needs.

Table 3.2: Choice matrix, community relations scenario

Finally, the internal scenario read:

Tensions have been building between the US and the nation of Liscka for the past six months. National news reports say that war with Liscka is imminent, especially after a recent terrorist attack traced to Liscka's intelligence service. On her own, with no specific orders or threat warning, your unit commander decides to cancel all leave. The holiday season is approaching and there is a general outcry from your unit's military and civilian workers and especially from their families. They see no reason for this decision since no other military unit has canceled leave.

Attribute	Level	Description
Communication	Low/One-Way	Have commander explain her decision in a letter to workers.
	Mixed	Solicit feedback from those who want to take leave.
	High/Two-Way	Hold open meetings that foster dialogue with internal publics.
Short Term Purpose	Low/Asymmetric	Try to get everyone to accept the decision to cancel leave.
	Mixed	Grant leave on a limited, case-by-case basis.
	High/Symmetric	Leave open the possibility that no-leave policy may be reversed.
Long Term Purpose	Low/Asymmetric	Push commander's agenda to protect her image.
	Mixed	Change the policy if it benefits morale and preserves readiness.
	High/Symmetric	Allow workers and families some influence over policy decisions.

Table 3.3: Choice matrix, internal information scenario

The first screen each respondent saw during this portion of the interview was the scenario. They were then presented with a listing of the communication attribute's levels and asked to choose their favorite choice and their next favorite choice. Two more similar screens required respondents to choose from short term purpose and long term purpose levels.

From these responses, the ACA program calculated preferences, then presented the most-preferred level against the least-preferred level and asked the respondent how important the difference between the two levels was to him or her. Respondents rated the importance from "not at all important" to "extremely important."

From these responses, ACA built choice combinations using all three attributes at a time. It presented two choices to the respondent, each choice incorporating a communication, short term purpose and long term purpose level. The respondents indicated their preference for one or the other choice combination on a scale from "strongly prefer (the choice combination on the) left" to "strongly prefer (the choice combination on the) right."

The computer presented up to ten of these choice combinations, depending on the respondent's consistency in choosing levels. The program then moved on to present the next scenario and questions until all three scenarios had been run. See Appendix A for a representation of the screen displays.

ACA calculates utilities for each of the nine levels for each respondent by ordinary least squares regression (Sawtooth, 1991). The least-liked of the nine levels is

set to zero. The remaining values are scaled so that their sum is equal to 100 times the number of attributes, in this case a total of 900 points. The result is a compensatory model with nine utility scores for each respondent. The utility scores represent the salience each respondent allocates to each attribute level.

### 3.1.3 Measuring LMX

This study measured the Quality of Superior-Subordinate Relationship using the six-question Leader Member Exchange Scale (LMX-6) developed and tested by Schriesheim et. al (1992). Schriesheim, Scandura, Eisenbach & Neider (1989) validated the scale using maximum likelihood confirmatory factors analysis and found acceptable internal reliability using a test-retest method (Schriesheim et. al., 1989). Internal reliability was also high in this study.

Researchers developed the items by conceptualizing LMX as a sum of factors of Perceived Contribution (LMX1 and LMX4 in the questionnaire), Loyalty (LMX2 and LMX5) and Affect (LMX3 and LMX6). See Appendix A for the questionnaire.

### 3.2 Survey frame and sample

A frame was developed from the Air Force Personnel Center's computerized "HAF" database of all 1376 active-duty and civilian Air Force members who carried the personnel code indicating they were public affairs practitioners. Examination revealed 29 people on the list who were not qualified for this study because they were in initial training programs or were Air Reserve Technicians, people who hold both military rank and civilian positions in the Air Force Reserve. These names were removed.

The sample still consisted of some Air Force public affairs personnel who were assigned to units not listed in the Air Force PA directory. There was a chance they were working in non-public affairs jobs, such as Services marketing or recruiting duty. However, since they held the personnel code for public affairs, they were deemed theoretically eligible for the study. Only nine of these people ended up in the sample.

The Air Force Reserves and Air National Guard are taking on an increasing part of the Air Force mission with nearly 150,000 people now serving (US Air Force Almanac, 1997). In addition there are more cooperative efforts between the military service branches today. It would have added to the validity of this study if all military public affairs practitioners of all branches of service were included. However records of each of the military branches, the reserves, and National Guard forces are kept at different locations in data bases separate from the active-duty Air Force records. Gaining separate permission to obtain these lists and integrating them into the sample frame would have exceeded the resources available to this study and was not done.

It was also necessary to screen out public affairs practitioners who have been in their present jobs for less than 30 days or who have been working for their supervisor for less than 30 days. This rule takes into account the finding by Dansereau, et. al. (1975) that it takes almost a month for LMX to stabilize.

The original frame was actually three separate lists of 366 officers (after vetting), 473 enlisted and 507 civilians for a total of 1376 people. The three lists were consolidated and sorted alphabetically to remove potential patterns. Then an equal

probability sample of 196 was drawn, using a random start generated by Microsoft Excel's RAND function.

### 3.3 Pretesting

The survey was pretested on 10 Air Force public affairs practitioners, five each from the Headquarters, Air Force Materiel Command and the Aeronautical Systems Center at Wright-Patterson Air Force Base, Ohio. Each pretest respondent was mailed an early version of the survey on disk and was asked to comment on the survey after taking it. The pretest revealed only minor, mostly procedural flaws in the way the questions were presented. Minor changes were made to correct these problems.

### 3.4 Fielding the survey

The survey method was based on Dillman's (1978) Total Response Method which he claimed had achieved response rates better than 80% for specialized populations when the method was strictly followed. Dillman reported lower rates were achieved when his method was not strictly followed or with less specialized populations.

Once pretesting and revisions were completed, a preparatory note was sent via electronic mail to each member of the sample, asking them to look for the survey in the mail within 30 days and explaining the need for their prompt cooperation. Each name in the sample was cross-referenced with the 1996 Air Force Public Affairs Directory (AFNEWS, 1996) in order to obtain electronic mail addresses.

Although all Air Force public affairs offices now have electronic mail capabilities, not all individuals have their own e-mail account. In addition, not all the e-mail addresses listed in the directory were functional. In all, 63 members of the sample

could not be reached initially via e-mail. For these people, the same message was sent by fax or regular mail in the case of overseas locations that had no fax number listed in the directory.

In order to control for order effects, three versions of the survey were prepared. The order of presentation of the three scenarios was rotated in the three versions using a Latin-Square design. The three master disks were duplicated and randomly assigned to the study participants.

Disks were sent by US Mail on Dec. 6, 1996. Each disk was accompanied by a pamphlet which introduced the study, gave directions on how to use the disks and provided a paper copy of the three scenarios for easy reference. Also enclosed was a letter of endorsement from the Secretary of the Air Force's Director of Public Affairs, the ranking member of the public affairs community.

Reminder messages were sent via e-mail, fax, or mail, on Nov. 23, Dec. 3, and Dec. 17. Follow-up telephone calls were made Jan. 6-8, 1997. Data collection was completed January 15, 1997.

## CHAPTER 4

### RESULTS

#### 4.1 Sample

Total response rate was 58.16% with 114 of 196 surveys returned. Four of the surveys were found to be invalid. Six additional surveys were received after January 15, 1997 and were not used in data analysis.

Rank	Population	% of Pop.	Sample	% of Sample	Sample/ Pop.	Response	Resp. Rate	Resp./ Pop.
2Lt	30	2.18%	4	2.04%	13.33%	3	75.00%	10.00%
1Lt	40	2.91%	11	5.61%	27.50%	8	72.73%	20.00%
Capt	165	11.99%	16	8.16%	9.70%	11	68.75%	6.67%
Maj	79	5.74%	7	3.57%	8.86%	3	42.86%	3.80%
LtCol	59	4.29%	12	6.12%	20.34%	6	50.00%	10.17%
Col	23	1.67%	5	2.55%	21.74%	5	100.00%	21.74%
Airmen	72	5.23%	10	5.10%	13.89%	5	50.00%	6.94%
Sgt	99	7.19%	19	9.69%	19.19%	7	36.84%	7.07%
SSgt	133	9.67%	25	12.76%	18.80%	11	44.00%	8.27%
TSgt	94	6.83%	13	6.63%	13.83%	12	92.31%	12.77%
MSgt	72	5.23%	8	4.08%	11.11%	4	50.00%	5.56%
SMSgt	3	0.22%	0	0.00%	0.00%	0	NA	0.00%
Civilian	507	36.85%	66	33.67%	13.02%	39	59.09%	7.69%
<b>Totals</b>	<b>1376</b>	<b>100.00%</b>	<b>196</b>	<b>100%</b>	<b>14.2%</b>	<b>114</b>	<b>58.16%</b>	<b>8.3%</b>

Table 4.1 Response rate

As Table 4.1 shows, the sample was a good representation of the population.

Babbie (1995, p. 262) considered a 50% response rate "adequate" and 60% "good." Yu and Cooper (1983), reported that mail surveys averaged a 47% response rate.

More specific to this population, a 1996 mailed survey sampling 231 Air Force public affairs officers achieved an 81% response rate (A. Sutherland, personal communication, January, 1997). However, return rates for Air Force News Center surveys mailed to a variety of Air Force personnel in all career fields range from 24-49%. Considering these previous studies and results, return rates were deemed adequate for this study and further analysis was pursued.

## 4.2 Demographics

### 4.2.1 Experience

Experience was initially measured by both number of years of government service and years of service in public affairs. The two measurements were so highly correlated (Pearson's  $r > .80$ ) that they were collapsed into one variable by taking the average. Mean Experience was 11.6 years, which comes close to the mean experience for officers in the Air Force which is listed as 11.4 years (AFPC, 1997). For enlisted members in the Air Force population, mean experience is 9.3 years and for civilians 16.0 years.

### 4.2.2 Gender

Out of 110 respondents who reported their gender 40% were women. Mean experience for men was 13.68 years, compared to women who averaged only 8.54 years. This mean difference was significant at  $p < .01$ . This is most probably an artifact of the relatively recent equality of opportunity for women in military service.

### 4.2.3 LMX

The next item of interest was the quality of Leader-Member Exchange. As explained in Chapter 2, LMX is measured using a 6-item scale. Each item was scored



one to five with five representing the highest-quality relationship. Correlations between the six items in the LMX scale were all significant at  $p < .01$ , and the reliability coefficient was  $\alpha = .88$ . The correlation matrix is presented in Table 4.2. Then, the six items were averaged to form an LMX index; the average score was 3.98 on a five-point scale.

	LMX 1	LMX 2	LMX 3	LMX 4	LMX 5
LMX 1	1.00				
LMX 2	.61	1.00			
LMX 3	.43	.59	1.00		
LMX 4	.48	.64	.52	1.00	
LMX 5	.49	.77	.70	.52	1.00
LMX 6	.48	.47	.70	.46	.59

Table 4.2 Pearson correlation matrix for LMX-6 items

All  $p < .01$

$\alpha = .88$

#### 4.2.4 LMX and Gender

Average LMX score for men was 4.18 ( $n = 66$ ), while women scored 3.67 ( $n = 43$ ). The mean difference was significant ( $t = 3.18$ ,  $df = 107$ ,  $p < .01$ ).

#### 4.2.5 LMX and Experience

The correlation between LMX and Experience (.16) was tending toward significance at  $p < .10$ .

### 4.3 Utility in responses to public affairs scenarios

The conjoint data from each of the three scenarios were analyzed separately. The scenarios addressed each of the three major publics that Air Force public affairs is organized to reach; news media, the civilian community, and the internal audience.

Although these three areas are broad in scope, they provide insight into whether or not practitioners tailor their decisions for different publics. In essence, for each scenario, utilities were computed for the nine conditions of the 3 (communication, short term purpose, long term purpose) x 3 (low, mixed, high) design. For each scenario, therefore, the output matrix has nine variables and 110 cases.

#### 4.3.1 Examining utilities

Typically in conjoint analysis, the matrix is summarized two ways, which provides insight into decision making. At one level, the attributes are evaluated and used as indicators of the salience of the attributes in the decision making process. In the next level, the “part-worths,” utilities of each of the levels within an attribute, are examined to determine how the levels influence the attributes.

Data for each scenario were tested using a 3 x 3 within-subjects analysis of variance. This test would help to answer Research Question 1. It tested whether or not respondents varied significantly in their utilities, as we would expect to find in a mixed model of practice. A lack of variance would support the more restrictive idea that individual practice is based upon an organization’s overarching public relations model.

Next, the main effect for attribute was analyzed, examining which of the three attributes held the greatest salience for the respondents. Paired t-tests were used to test whether mean utility for each of the attributes was significantly different. This also tested Research Question 1 by examining whether salience for communication direction, short term or long term purpose differed for each scenario.

Next compared were the maximum utility models for each scenario. These were the levels of each attribute that received the highest mean utility in each scenario. Means differences between the maximum levels and other levels within the same attribute were tested for significance with paired t-tests. This also tested Research Question 1 by looking for patterns between and within scenarios. Consistent within scenarios, such as all high levels receiving the maximum utility, would indicate a link between direction and purpose. Consistent patterns in the maximum utility models between scenarios would support the idea that there is an overarching model of practice that influences individual decisions. Inconsistent patterns would support the mixed-motive model of practice as practitioners respond to the scenario by choosing different levels of direction and purpose, based on their own perceptions of the trade offs necessary to resolve the choice situation.

<b>Scenario</b>	<b>Maximum Utility Attribute</b>	<b>Communication</b>	<b>Short Term Purpose</b>	<b>Long Term Purpose</b>
Media	Long Term Purpose	Mixed	High	High
Community	Communication	High	High	Mixed
Internal	Long Term Purpose	Low	High	Mixed

Table 4.3 Maximum utility attribute and maximum utility model by scenario

Research question 2 and 4 were examined by running Pearson correlations between Experience or the average LMX score, respectively, and assigned utilities for

each respondent in each scenario. Utilities for attributes and attribute levels were tested. Significant correlations would indicate a relationship between utility scores and Experience or LMX.

Research Question 3 was examined by comparing Gender with utility scores through independent samples t-tests. Significant differences would indicated that men and women weigh factors differently when deciding how to respond to the scenarios.

	<b>Media</b>	<b>Community Relations</b>	<b>Internal</b>
<b>Experience (Q2)</b>	none	+ Hi Comm	none
<b>Gender (Q3)</b>	none	Men + Hi Comm	none
<b>LMX (Q4)</b>	none	+ Comm - Long Term - Hi Long Term + Lo Short Term	+ Mixed Long Term

Table 4.4 Significant relationships by scenario for Experience, Gender and LMX

Research Question 5 was tested using cluster analysis to examine how respondents might group together base on the utility they assigned to each attribute level. Clusters were then examined to determine whether Experience, LMX or Gender was significantly different between the groups. This was done post-hoc when it appeared that some individuals might have concentrated on only one level or attribute. Significant clusters would indicate that there was a pattern to the respondent's utility for certain attributes or levels. Significant demographics related to a group would indicate a model of practice for certain demographic groups.

#### 4.3.1.1 Media scenario

Utilities were analyzed using a 3x3 within-subjects analysis of variance. The main effect for the attributes,  $[F(2,210) = 31.052, MSe = 611.89, p < .001]$ , the main effect for levels  $[F(2, 210) = 60.696, MSe = 884.31, p < .001]$ , and the interaction  $[F(4,420) = 71.491, MSe = 811.411, p < .001]$  were all significant. The significant interactions clearly represent that a mixed model better characterized the data than did the excellence model.

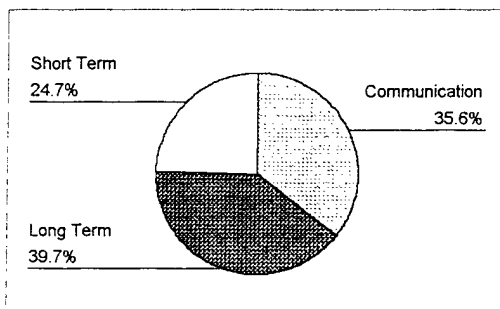


Figure 4.1 Attribute salience, media scenario

Next, the main effect for attribute was analyzed in detail. In the media scenario, long term purpose received higher utility than short term purpose or communication. The mean difference with short term purpose was significant ( $t = 7.91, df = 105, p < .01$ ). The mean difference with communication tended toward significance.

Next compared were the maximum utility levels and other levels within attributes, using paired t-tests. Mean utility for the mixed level of communication was significantly greater than the other communication levels. The high levels of short term and long term purpose scored highest within their respective attributes.

In sum, the maximum utility model for this scenario was:

Mixed Communication + High Short Term Purpose + High Long Term Purpose.

	Communication	Short Term Purpose	Long Term Purpose
Low	26.18	19.68	9.15
Mixed	<b>61.48</b>	23.93	36.18
High	19.02	<b>30.59</b>	<b>73.78</b>
Total	106.69	74.20	119.11

Table 4.5 Distribution of utility part-worths, media scenario n = 106

T-tests for the communication attribute found significant means differences between the highly-scored mixed level and both the low ( $t = -8.79$ ,  $df = 105$ ,  $p < .01$ ) and high ( $t = -9.71$ ,  $df = 105$ ,  $p < .01$ ) levels. T-tests for short term purpose found significant means differences between the highly-scored high level and the low ( $t = 2.93$ ,  $df = 105$ ,  $p < .01$ ) and mixed ( $t = 1.94$ ,  $df = 105$ ,  $p < .06$ ) levels. T-tests for levels of the long term purpose attribute found significant means differences between the highly-scored high level and both the low ( $t = 16.08$ ,  $df = 105$ ,  $p < .01$ ) and mixed ( $t = 11.71$ ,  $df = 105$ ,  $p < .01$ ) levels.

The utility for each level in the maximum utility model (Table 4.3) was correlated against LMX and Experience. No significant differences were observed. No significant differences were found in t-tests between these levels and Gender.

In the next phase, the 9-variable utility matrix was submitted to a cluster analysis to examine how respondents might group together based on the utility they assigned to each attribute level. None of the demographic factors for each cluster proved to be

significant, but the results were none the less interesting for an exploratory study of this type.

	<b>Communication</b>	<b>Short Term Purpose</b>	<b>Long Term Purpose</b>
Cluster 1	Mixed 46.70	High 33.20	High 89.34
Cluster 2	Mixed 80.04	Mixed 30.12	High 63.75
Cluster 3	Low 34.62	High 68.30	High 65.07

Table 4.6 Maximum utility matrix for clusters, media scenario

	<b>n = 41 Cluster 1</b>	<b>n = 54 Cluster 2</b>	<b>n = 11 Cluster 3</b>
Experience (mean)	12.84	10.82	11.04
LMX (mean)	4.05	3.98	3.76
Men	28	31	4
(total % in cluster)	(68%)	(57%)	(36%)
Women	13	23	7
(total % in cluster)	(32%)	(43%)	(64%)

Table 4.7 Cluster demographics, media scenario

#### 4.3.1.2 Community relations scenario

This scenario's utilities were also analyzed using a 3 x 3 within-subjects analysis of variance. The main effect for the attributes,  $[F(2,214) = 3.767, MSe = 677.511, p < .03]$ , the main effect for levels  $[F(2, 214) = 78.232, MSe = 1195.86, p < .001]$ , and the interaction  $[F(4,428) = 18.503, MSe = 862.331, p < .001]$  were all significant. The significant interactions again clearly represent that a mixed model better characterized the data than did the excellence model.

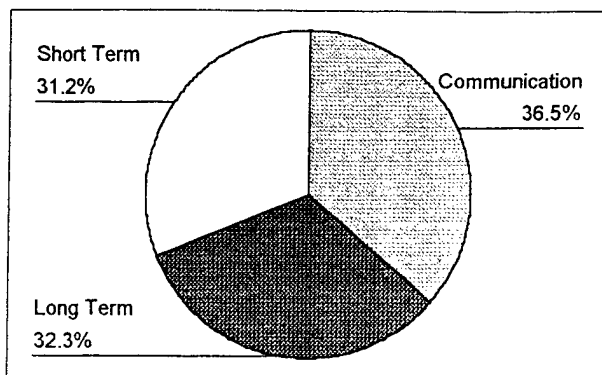


Figure 4.2 Attribute salience, community relations scenario

Next, the main effect for attribute was analyzed in detail. In the community relations scenario, communication received higher utility than short term purpose or long term purpose. The mean differences between communication and long term purpose and short term purpose tended toward significance.

Next, I compared the differences between the maximum utility levels and other levels within attributes, using paired t-tests.

The maximum utility model for this scenario was:

Two-Way Communication + Symmetric Short Term Purpose + Mixed Long Term Purpose.

	Communication	Short Term Purpose	Long Term Purpose
Low	11.85	17.09	17.72
Mixed	31.19	30.07	<b>43.85</b>
High	<b>66.50</b>	<b>46.44</b>	35.29
Total	109.54	93.61	96.86

Table 4.8 Distribution of utility part-worths, community relations scenario  
n = 108



T-tests for the communication attribute found significant means differences between the highly-scored high level and both the low ( $t = 12.97$ ,  $df = 107$ ,  $p < .01$ ) and mixed ( $t = 8.23$ ,  $df = 107$ ,  $p < .01$ ) levels. T-tests for short term purpose found significant means differences between the highly-scored high level and the low ( $t = 6.66$ ,  $df = 107$ ,  $p < .01$ ) and mixed ( $t = 3.41$ ,  $df = 107$ ,  $p < .01$ ) levels. T-tests for levels of the long term purpose attribute found significant means differences between the highly-scored mixed level and both the low ( $t = -6.31$ ,  $df = 107$ ,  $p < .01$ ) and high ( $t = -1.95$ ,  $df = 107$ ,  $p < .05$ ) levels.

Correlations between LMX or Experience and the maximum utility levels were not significant. However, LMX had a significant ( $p < .04$ ) positive effect on utility for the communication attribute. LMX also had a strongly significant ( $p < .01$ ) negative effect on utility for the long term purpose attribute. Men were found to have a significantly higher utility for two-way communication ( $t = 2.10$ ,  $df = 106$ ,  $p < .04$ ) in this scenario.

The two hypotheses predicted significant, positive correlations between LMX and the “high” levels of each attribute that represent symmetric practice. However, a significant ( $p < .05$ ) negative correlation with the high level of long term purpose was found in this scenario. Significant ( $p < .05$ ) positive correlations were found with the low level of short term purpose in this scenario. The correlation between Experience and utility for two-way communication was tending toward significance.

Utility part-worths were again submitted to cluster analysis and again, none of the values showed significant differences but were interesting.

	Communication	Short Term Purpose	Long Term Purpose
Cluster 1	High 67.42	High 68.02	High 51.86
Cluster 2	High 98.82	Mixed 28.40	Low 35.65
Cluster 3	Mixed 33.39	Mixed 54.50	Mixed 58.76

Table 4.9 Maximum utility matrix for clusters, community relations scenario

	n = 59 Cluster 1	n = 26 Cluster 2	n = 23 Cluster 3
Experience (mean)	11.55	12.94	10.00
LMX (mean)	3.87	4.20	4.03
Men	37	16	12
(total % in cluster)	(63%)	(62%)	(52%)
Women	22	10	11
(total % in cluster)	(33%)	(38%)	(48%)

Table 4.10 Cluster demographics, community relations scenario

#### 4.3.1.3 Internal Scenario

Utilities were again analyzed using a 3 x 3 within-subjects analysis of variance. The main effect for the attributes, [ $F(2,204) = 5.359$ ,  $MSe = 780.31$ ,  $p < .01$ ], the main effect for levels [ $F(2, 204) = 2.955$ ,  $MSe = 1257.25$ ,  $p < .055$ ], and the interaction [ $F(4,408) = 39.436$ ,  $MSe = 1020.98$ ,  $p < .01$ ] were all significant. The significant interactions again clearly represented that a mixed model better characterized the data than did the excellence model.

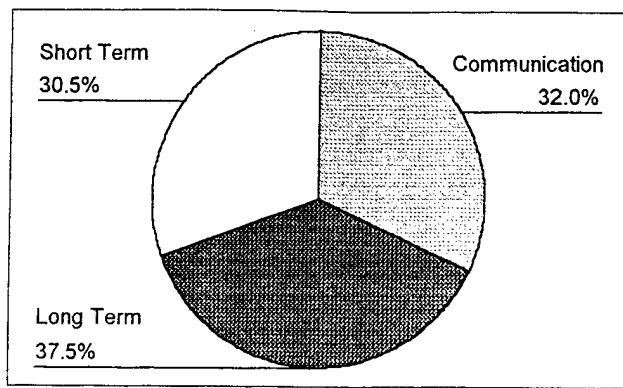


Figure 4.3 Attribute salience, internal scenario

In the internal scenario, long term purpose received higher utility than did short term purpose or communication. The mean differences were significant between long term purpose and communication ( $t = 2.50$ ,  $df = 107$ ,  $p < .02$ ) and between long term purpose and short term purpose ( $t = 3.05$ ,  $df = 102$ ,  $p < .01$ ).

Next compared were the maximum utility levels and other levels within an attribute, using paired t-tests. Utility for one-way communication was significantly greater than the other communication levels. Utility for high short term and mixed long term purpose were also highest within their respective attribute.

The maximum utility model for this scenario was:

Low Or One-Way Communication + Symmetric Short Term Purpose + Mixed Long Term Purpose.

	Communication	Short Term Purpose	Long Term Purpose
Low	<b>44.01</b>	23.90	20.86
Mixed	11.81	28.74	<b>61.39</b>
High	40.10	<b>38.95</b>	30.25
Total	95.92	91.59	112.50

Table 4.11 Distribution of utility part-worths, internal scenario  $n = 103$

T-tests for the communication attribute found a significant means difference between the highly-scored low level and the mixed ( $t = 7.55$ ,  $df = 102$ ,  $p < .01$ ) levels, but not with the high level. T-tests for short term purpose found significant means differences between the highly-scored high level and the low ( $t = 3.10$ ,  $df = 102$ ,  $p < .01$ ) and mixed ( $t = 2.44$ ,  $df = 102$ ,  $p < .02$ ) levels. T-tests for levels of the long term purpose attribute revealed a significant means difference between the highly-scored mixed level and the low ( $t = -7.93$ ,  $df = 102$ ,  $p < .01$ ) and high ( $t = -7.95$ ,  $df = 102$ ,  $p < .01$ ) level.

Correlations between the maximum utility levels and Experience were not significant. LMX was correlated significantly with mixed long term purpose at the  $p < .02$  level. No significant means differences were found between the maximum utility levels and Gender.

Utility part-worths were again subjected to cluster analysis and again, none of the values showed significant differences but provided interesting insight.

	Communication	Short Term Purpose	Long Term Purpose
Cluster 1	Low	High	Mixed
	42.30	43.16	75.67
Cluster 2	High	Mixed	Low
	98.82	28.40	35.65
Cluster 3	Low	High	Mixed
	46.85	34.19	53.09

Table 4.12 Maximum utility matrix for clusters, internal scenario

	n = 51 Cluster 1	n = 37 Cluster 2	n = 14 Cluster 3
Experience (mean)	11.98	10.97	10.82
LMX (mean)	3.82	4.09	4.30
Men	29	21	9
(total % in cluster)	(57%)	(57%)	(64%)
Women	22	16	5
(total % in cluster)	(43%)	(43%)	(36%)

Table 4.13 Cluster demographics, internal scenario

#### 4.3.2 Across-scenario relationships

Data analysis techniques comparing utility scores between scenarios would be meaningless because the scores have meaning only within each scenario. Utility scores are based on a compensatory model for each scenario. Scores are derived from comparisons of attributes within the context of each scenario, but not across scenarios. For example, one-way communication in the internal scenario was never presented against one-way in the media scenario and their relative importance was not calculated. To gather this data would mean presenting all three scenarios simultaneously. This would almost certainly overwhelm each respondent's ability to weigh every level against the others.

## CHAPTER 5

### DISCUSSION AND CONCLUSIONS

The first goal of this study was to extend the theory of symmetrical public relations by examining symmetrical behavior, where the goal of organizational communication is to “manage conflict and promote mutual understanding with key publics” (Dozier et. al, 1995, p. 13). Previous studies had examined public relations behavior using a dichotomy between one-way and two-way communication and between symmetry and asymmetry. Implicit in this study, however, was the concept of a continuum between these variables. Though the concept of a continuum had been addressed (e.g., Murphy, 1989; Dozier et. al., 1995), an exhaustive search found no rigorous empirical validation of this concept.

This study found that using conjoint analysis to measure utility in decision-making can provide more insight into the way public relations practitioners make decisions in the real world. However, utility for degrees of asymmetric or symmetric practice were found to be inconsistent. Instead, practitioners seem to assign different utilities to symmetrical public relations behavior when they encounter different target publics. Decision-making seems to be somewhat conditional, but best described by a mixed-motive model.

More importantly, there seems to be no link in the reasoning of practitioners between direction and purpose. Results show that practitioners find it reasonable to employ asymmetric communication techniques to achieve symmetric short and long term goals, and vice versa.

### 5.1 Media scenario

As a group, it appears this sample found greater salience in the long term relationship with the media, rather than with facing the immediate threat of the interview. This result shows an appreciation for the power of the media in American society and the need for the organization to concentrate on their long-term communication goals.

Further analysis revealed evidence of mixed-motive behavior underlying the utility for each of the attributes. As Table 4.3 shows, this group saw the mixed communication option as a realistic path toward symmetric short and long term goals. When interpreted by the organizational culture, which previous research has identified with the asymmetric, public information model, this makes sense. In a culture in which public relations is seen as a clearinghouse for information flowing to the public, public relations practitioners should expect to retain some control of the communication environment.

Cluster 1 reported the most symmetric utilities of the three clusters in this scenario. They displayed the same utility scheme as the larger sample by assigning the highest utilities to mixed and two-way communication, and to mixed and symmetric long term purpose. Symmetric long term purpose had by far the highest mean for this cluster. Like the larger sample, this cluster appears to look beyond the immediate concern of the

interview to the long term relationship with the media. This group was split between asymmetric and symmetric short term purpose, however.

Cluster 2 appeared to be the more cautious group, assigning the highest utility to mixed communication. The group was somewhat evenly split between all three levels of short term purpose. This cluster, like the others in this scenario, also favored symmetric long term purpose over the other long term levels. This group appeared to concentrate more on communication technique and favored one-way or mixed methods over two-way communication.

Cluster 3 was quite small with only 11 cases. This group also favored less-open communication techniques but put the highest utility in symmetric short term purpose and in the short term purpose attribute in general. The group seemed to trust the reporter but they still favored mixed or one-way communication. Of the three clusters, this group had the second-highest utility for symmetric long term purpose. However, it also had the highest utility for asymmetric long term purpose.

## 5.2 Community Relations Scenario

Greater salience for the communication attribute in this scenario may indicate that the sample appreciated this situation more as the beginning of a longer-term dialogue than was true in the media or internal scenarios. LMX seems to affect the way practitioners approached the problem in this scenario with those enjoying higher LMX concentrating more on communication. Those with lower LMX seemed to concentrate on long term goals.



In examining the utility part-worths (Table 4.6), it appears the sample concentrated on establishing an open dialogue with the Native American tribe with symmetric short term goals in mind. However, at this early stage in the dialogue, the sample was still hesitant about making long-term concessions, giving the highest long term purpose utility to the mixed level.

Cluster 1 was the largest with more cases than the other two clusters combined. This cluster's most striking feature is that within all attributes, the highest utilities were assigned to the most symmetric levels. Of the three, this cluster had the lowest mean LMX score even though it was the most symmetrical in its choices.

Cluster 2, which had the largest average LMX score and the highest experience level of the three clusters, was characterized by two-way, asymmetrical choices. This cluster gave the highest utility mean, 98.82 of the 300 possible points, to two-way communication alone. However, within the other attributes, short and long term symmetry, this cluster assigned the least utility to symmetric levels.

Cluster 3, with the smallest number of cases and the lowest mean Experience, gave the highest utility to mixed levels of short and long term purpose. The mixed level also rated highest among the communication levels, but utilities were within 7 points for all the communication levels. This group seemed to be looking toward a mixed-motive solution to the dispute that reserves power for their organization.

### 5.3 Internal Scenario

As in the media scenario, it appears from the distribution of the attribute utilities (Figure 4.2) that the sample found greater salience in the long term relationship with the

public rather than with solving the immediate problem. This result shows an appreciation for the relationship with the internal audience and the need for the organization to concentrate on long-term communication goals.

Further analysis revealed evidence of mixed-motive behavior underlying the utility for each of the attributes. As Table 4.9 shows, this group saw one-way communication as a realistic path toward symmetric short term and mixed long term goals. When interpreted through a hierarchical organizational culture, these results make sense. In a culture in which orders are usually given with no consultation, it make sense to value a one-way communication model. However, the two-way model also scored well, the third-highest of all the attribute levels in this scenario. Since morale is an important commodity, especially in a military unit, it makes sense that public affairs practitioners would not “slam the door” on the concerns of the troops and their families, but would leave open the possibility that unpopular policies might be changed, if there was some other payoff. Public affairs professional training may also be a factor and will be discussed later.

In this scenario, LMX was negatively correlated with utility for symmetric long term purpose. This finding, along with the negative correlation between LMX and utility for the entire long term purpose attribute in the community relations scenario, may indicate an unforeseen effect of LMX. We expected to find LMX positively correlated with symmetrical choices since LMX seems to be fostered in a more open communicative environment. However, those workers who enjoy a higher quality relationship with their supervisor may, in doing so, develop a more protective stance for

their supervisor. These “in-group” workers may become more identified with and protective of the dominant coalition than are those “out-group” members who reported lower LMX.

Cluster analysis of this scenario also provided interesting findings. Cluster 1 contained 51 cases, more than the other two clusters combined. The group had the highest mean Experience and the lowest mean LMX. It reflected the trend for the larger sample in giving the highest utility scores to one-way communication and to mixed short and long term purpose.

Cluster 2 showed signs of being the most “hard-line” group. This group gave high utility to one-way communication and to asymmetric long term purpose. Utilities for levels of short term purpose had a range of less than 4 points..

Cluster 3 seemed to concentrate almost exclusively on two-way communication. This cluster gave nearly a third of the possible utility points to this level. This cluster, the smallest and with the highest mean LMX, seemed to assign very high value on an open dialogue with the internal audience, though it seems to be unclear of its communication goals.

#### 5.4 Analysis of Findings by research question

##### 5.4.1 Research Question 1: Is utility consistent?

Utility was found to be inconsistent, supporting a mixed-motive (Murphy, 1991) or a contingency theory of public relations practice (Cancel et. al., 1997). J. Grunig and L. Grunig (1987) also found that “organizations do and should use different models strategically to deal with different public relations problems and different sources of

conflict in their environment” (p. 59). Since the amount of information available to respondents was severely limited in this study, their decision matrix may be more dependent on the situation surrounding the decision than to their internalized utility for particular attributes like communication or purpose.

The contingency model (Cancel et. al., 1997), as explained in Chapter 2, appears to be far too relaxed, however. This study found that a solid model resulted from utility scores based on the direction and purpose dimensions from symmetrical public relations theory. Although responses were inconsistent, it appears that direction and purpose are important variables in public relations decision making and should not be abandoned. Evidence gained here points towards a model where public relations practitioners use a mixed combination of one-way and two-way communication to achieve both asymmetric and symmetric goals, depending on the target public, as Plowman (1996) suggested. Of course, additional variables should also be subjected to further study.

Three other explanations could account for the lack of consistency in utility for attributes and attribute levels across the three scenarios. One explanation may be the practitioner’s definition of the threat posed by the public. Dozier et. al. (1995) defined three types of publics that public relations managers must account for; *Latent*, *Aware* and *Active* publics. *Latent* publics are affected by an organization, but are not aware of this. *Aware* publics recognize they and others are affected, but are not organized. *Aware* publics become *Active* when they become organized toward some common goal.

Since active publics present the most threat to the organization, some public relations practitioners may be inclined to marginalize the other two types (Dozier et. al.,

1995). J. Grunig (1984) also predicted more symmetrical practice for levels of "medium constraint" where pressure from activist publics on the organization had not yet become a crisis for the organization. In this study the only public that shows potential to organize against the Air Force is the Native American tribe in the community relations scenario. The reporter in the media scenario presents an immediate, singular threat to the organization's image. However, like the workers in the internal scenario, there is no indication of an organized opposition movement. This would account for the high salience of communication in the community relations scenario while long term purpose rated higher in the other two.

Another explanation may lie in the training that public affairs practitioners receive. Almost all Air Force public affairs practitioners receive initial training through the Defense Information School, known by the acronym DINFOS. Enlisted public affairs personnel receive training in areas that Grunig (1989) would deem "craft" such as writing news releases. Officers and civilian practitioners receive "craft" training but also basic training in "professional" areas such as developing relationships with publics and conducting rudimentary research such as environmental scanning.

The major thrust for the officer and civilian training, however, is in media relations (J. Boyle, personal communication, January, 1997). They are taught to be wary, but respectful of reporters. This attitude has "come a long way in recent years" (Boyle), however, and the press is now seen not as an enemy, but as a legitimate public with legitimate duties to perform. Training includes role playing where students are taught to

train their organization's personnel to be forthcoming with, but wary of reporters. This includes setting up ground rules for interviews, especially in high-threat situations.

DINFOS students are taught how to communicate with internal audiences mainly through one-way techniques such as base newspapers or speeches given by commanders to the troops. Hence, the high scores for one-way communication in the internal scenario. However, students are taught to value and develop long-term relationship with external publics so that good will might help mitigate negative public reaction to crises such as aircraft accidents or crimes committed by military personnel. This may contribute to the high scores for two-way communication in the community relations scenario.

A third plausible explanation may be that so few respondents are accredited and so may have little knowledge of symmetrical public relations theory or techniques. Only eight respondents reported any type of public relations accreditation. The Air Force Public Affairs Alumni Association and the Secretary of the Air Force's Public Affairs office have recognized this shortcoming and recently began a program to help practitioners achieve their accreditation in the International Association of Business Communicators or Public Relations Society of America (J. Richardson, personal communication, January, 1997). Dozier et. al. (1995) explained that training in symmetrical public relations, along with advanced education, is essential to developing symmetrical practice and for vital access to the dominant coalition.

#### 5.4.2 Research Question 2: Experience's effect on utility

Experience was found to be significantly related to utility in only one case where it was positively correlated with two-way communication in the community relations scenario. More solid evidence may have been found with a larger sample size for this and the other demographic variables. However, Experience appears to have a positive effect on utility for symmetrical behavior. An explanation for this might be that those with more experience have learned how to use symmetrical techniques. They may have also learned that asymmetrical techniques are ineffective, as L. Grunig (1986), Childers (1989), Kelly (1989) and Turk (1986) found. Those with more experience have also seen relationships with publics evolve over the long-run and so may appreciate the need to cultivate mutually-beneficial relationships.

#### 5.4.3 Research Question 3: Gender's effect on utility

The lack of significant effects for gender may be due to the opposing pulls of LMX and Experience. Women reported significantly less experience than men. It followed then that women assigned a higher mean utility for one-way communication in the media scenario than did men. However, women also reported lower LMX than did men, which should lead them to more symmetrical behavior.

#### 5.4.4 Research Question 4: LMX effect on utility

LMX was found to be a significant covariate in only a few cases. This study's theoretical links between LMX and public relations practice may need revision in light of this evidence towards a notion that higher LMX may be related to more protective behavior.

LMX appears to pull practitioners in this sample away from symmetrical practice. This appeared to be the trend in every scenario, though values did not reach significance due, perhaps, to the small sample size. There is some logic to this finding. An organization's communication model is dictated from the dominant coalition depending partially on the training public relations practitioners have received (J. Grunig 1989). Since Air Force public affairs training tends to be in one-way techniques, it follows that the dominant coalition would choose one-way techniques more often. Schiemann and Graen (1987) found that LMX was positively related to agreement between subordinate and supervisor. Therefore, those with higher LMX may better perceive a one-way preference in their supervisors and tend towards that worldview.

#### 5.4.5 Research Question 5: Do respondents group together by utility and demographics?

Cluster analysis revealed that Air Force public affairs practitioners fell into two dominant clusters in each scenario. One cluster appeared to find the greatest salience in communication while the other cluster found long term symmetry most salient. This study found no significant demographic trends for these clusters across all the scenarios. However, with larger sample size, more statistically significant groups may be found.

#### 5.5 Recommendations for further research

It was believed at the outset of this study that the quality of supervisor-subordinate relationships could be a viable variable in examining public relations decision making. The second goal for this study, after exploring symmetry, was to use Leader-Member Exchange theory to examine the effects of supervisor-subordinate



relationships on practitioners' decision making. The concepts inherent in LMX theory are closely related to an organization's internal culture and so were predicted to provide insight into public relations practice and enrich applied public relations theory.

However, no solid evidence was found to support LMX as a significant variable.

Further research should be done on other interpersonal and organizational factors that may impact public relations practice. Perhaps there is a better way to conceptualize and operationalize the degree to which practitioners feel they have some influence on their organization. Future studies using LMX might be better operationalized in experimental settings or in studies that gather more qualitative data. It would be interesting to see if LMX has an effect on the techniques practitioners have actually used in response to actual situations instead of hypothetical ones. The gender differences found here also merit further research.

The third goal of this study was to examine a military population that shares a common corporate culture as well as common training. Only one unpublished study (Van Dyke, 1989) had examined symmetrical behavior in military public affairs even though this group holds great social significance.

Although government public relations have been described as best fitting the public information model, it appears this study has found evidence that Air Force practitioners see value in a variety of symmetric and asymmetric communication techniques and goals. Future research should explore public affairs practitioners' attitudes toward specific publics to examine the reasoning behind this mixed behavior.

For example, evidence of low trust in reporters would help to explain the preference for the mixed technique found in the media scenario.

Regardless of this study's import for military public affairs, it does add quantifiable data to the study of public relations. Public relations theory is still relatively immature (Ehling, 1984) and there still appears to be no widely-accepted positive theory of public relations. It appears, however, that this study has found evidence to support a mixed-motive model of public relations. Until the many possible variables impacting public relations practice are investigated, however, there appears to be plenty of room for the intuitive, artistic aspect of the profession.

Perhaps if a normative theory of public relations were widely accepted, public relations behavior would be easier to predict. However, widespread knowledge of normative theories, let alone acceptance of one, seems to be far off. The movement to accredit Air Force public affairs practitioners seems to be a positive step toward expanding knowledge of norms and strengthening practice.

## BIBLIOGRAPHY

Air Force Instruction 35-205: Security and Policy Review (1994). US Government Printing Office.

Air Force Personnel Center world wide web homepage (Feb 9, 1997).  
<http://www.afpc.af.mil>.

AFNEWS (1996), Air Force Public Affairs Staff Directory. Kelly AFB, Texas: Air Force News Center.

Air Force Policy Directive 35-1: Public Affairs (1994). US Government Printing Office

Babbie, Earl (1995), The practice of Social Research, 6th Edition. Belmont, Calif.: Wadsworth Publishing.

Baker, Lee W. (1993), The Credibility Factor: Putting Ethics to Work in Public Relations. Homewood, Ill: Richard D. Irwin, Inc.

Beisecker, T. (1970). Game Theory in Communication Research: A reaction and Reorientation. The Journal of Communication, 20, 107-120.

Bernard, C. I. (1938). The functions of the executive. Cambridge, Mass: Harvard University Press.

Bernays, E. L. (1928). Propaganda, New York: Liveright.

Bostrom, R.N. (1970) Rejoinder: Games and Communicative Purpose. The Journal of Communication, 20, 121-124.

Cancel, A., Cameron, G, Sallot, L. & Mitrook, M. (1997). It Depends: A contingency theory of accommodation in public relations. Journal of public relations research, 9(1), 31-63.

Carling, A. H. (1989). Symmetry and social division: more on binary choice with externalizes. Behavioral Science, 34, 161-175.

- Childers, L. (1989). Credibility of public relations at the NRC. In J. Grunig & L. Grunig (Eds.), Public Relations Research Annual, 1, 97-114. Hillsdale, NJ: Erlbaum.
- Cutlip, S. & Center, A. (1952). Effective Public Relations. Englewood Cliffs, NJ: Prentice-Hall.
- Dansereau, F., Graen, G., & Haga, W.J. (1975). A vertical dyad linkage approach to leadership within formal organizations. Organizational Behavior and Human Performance, 13, 46-78.
- Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behavior. Journal of Occupational and Organizational Psychology, 67, 315-326.
- Dillman, Don A. (1978). Mail and other self-administered questionnaires. New York: Wiley-Interscience.
- Dillman, Don A. (1983). Mail and other self-administered questionnaires. In Peter Rossi, et. al., Handbook of survey research. Orlando: Academic Press, pp. 136-165.
- Dover, C. J. (1995). The shearing of the IABC lambs. The Journal of Management Advocacy Communication, 1(1), 38-45.
- Dozier, D. M. (1989, May) Importance of the concept of symmetry and its presence in public relations practice. Paper presented at the meeting of the International Communication Association, San Fransico.
- Dozier, D. M, Grunig, L. & Grunig, J. (1995). Manager's guide to excellence in public relations and communication management. Mahwah, NJ: Lawrence Erlbaum Associates.
- Ehling, W. P. (1984). Application of decision theory in the construction of a theory of public relations management. I. Public Relations Research and Education, 1, 2. Austin, TX: Association for Education in Journalism and Mass Communication.
- Epley, J. S. (1993). Ethics and Military Public Affairs. DINFOS Alumni Association Lectures, 2. Fort Benjamin Harrison, Indiana: Defense Information School.
- Fairhurst, G.T., & Chandler, T.A. (1989). Social Structure in Leader-Member Interaction. Communication Monographs, 56, 215-235.
- Fowler, F. J. (1993). Survey research methods. 2nd ed. Newbury Park, CA: Sage Publications.

- Gandy, O. H., Jr. (1982). Beyond agenda setting: Information subsidies and public policy. Norwood, NJ: Ablex.
- Goldman E. F. (1948). Two way street: The emergence of the public relations counsel. Boston: Bellman Publishing Company.
- Graen, G. & Cashman, J. (1975). A role-making model of leadership in formal organizations. A Developmental Approach. In J. G. Hunt and L.L. Larson (Eds.) Leadership Frontiers. (pp. 143-166) Kent OH: Kent State University Press.
- Graen, G., Cashman, G., Ginsburgh, S. & Schiemann, W. (1978). Effects of linking-pin quality upon the quality of working life of lower participants: A longitudinal investigation of the managerial understructure. Administrative Science Quarterly, 22, 491-504.
- Graen, G. & Ginsburg, G. (1977). Job resignation as a function of role orientation and leader acceptance: A longitudinal investigation of organizational assimilation. Organizational Behavior and Human Performance, 19, 1-17.
- Graen, G., Novak, M., & Sommerkamp, P. (1982). The effects of Leader-Member Exchange and Job Design on productivity and job satisfaction: Testing a dual attachment model. Organizational Behavior and Human Performance, 30, 109-131.
- Graen, G., Liden, R. & Hoel, W. (1982). The role of leadership in the employee withdrawal process. Journal of Applied Psychology, 67, 868-872.
- Graen, G., & Scandura, T.A. (1987). Toward a psychology of dyadic organizing. Research in Organizational Behavior, 9, 175-208.
- Graen, G., & Scandura, T.A. & Graen, M. R. (1986). A field experimental test of the moderate effects of growth need strength on productivity. Journal of Applied Psychology, 71, 484-491.
- Graen, G. & Schieman, W. (1978). Leader-member agreement: A vertical dyad linkage approach. Journal of Applied Psychology, 63, 206-212.
- Grunig, J. E., & Hunt, T. (1984). Managing Public Relations. New York: CBS College Publishing.
- Grunig, J. E. (1984) Organizations, environments, and models of public relations. Public Relations Research and Education, 1(4), 6-29.
- Grunig, J. E. (1989). Symmetrical Presuppositions as a framework for Public Relations Theory. In C. Botan & V. Hazelton (Eds.) Public Relations Theory. Hillsdale, NJ: Erlbaum. 17-44.

Grunig, J. E. & Grunig, L. (1989). Toward a Theory of the Public Relations Behavior of Organizations: Review of a Program of Research. Public Relations Research Annual, 1, 27-63.

Grunig, J. E. & Grunig, L. (1992). Models of Public Relations and Communication. In Grunig, J. E. (ed.) Excellence in Public Relations and Communications Management. (pp. 285-325). Hillsdale, NJ: Erlbaum.

Grunig, L. A. (1986 August). Activism and organizational response: Contemporary cases of collective behavior. Paper presented at the meeting of the Association for Education in Journalism and Mass Communication, Norman, OK.

Kelly, K. S. (1989) Shifting the public relations paradigm: A theory of donor relations developed through a critical analysis of fund raising and its effect on organizational autonomy. Unpublished doctoral dissertation, University of Maryland, College Park.

Krone, K. J. (1994). Structuring constraints on perceptions of upward influence and supervisory relationships. Southern Communications Journal, 59, 215-226.

Lee, J., & Jablin, F. M. (1995). Maintenance Communication in Superior-Subordinate work relationships. Human Communication Research, 22, 2, 220-257.

Liden, R. C. & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. Academy of Management Journal, 23, 451-465.

Morgan, D (1986). The Flacks of Washington. Westport, Connecticut: Greenwood Press, Inc.

Murphy, Pricilla (1991). The limits of Symmetry: A game theory approach to Symmetric and Asymmetric Public Relations. Public Relations Research Annual, 3, 115-131.

Neumann, J. Von & Morgenstern, O. (1944). The Theory of Games and Economic Behavior, Princeton, N.J: Princeton University Press.

Novak, M. A. & Graen, G. B. (1985). Leader resources as determinants of Leader-Member Exchange. Working paper, MA: University of Massachusetts.

Olasky, M. N. (1987). Corporate public relations: A new historical perspective. Hillsdale, NJ: Erlbaum.

Olasky, M. N. (1989). The Aborted Debate Within Public Relations: An approach through Kuhn's Paradigm. Public Relations Research Annual, 1, 87-95.

Pavlik J. V. (1989 May). The concept of symmetry in the education of public relations practitioners. Paper presented at the annual conference of the International Communication Association, San Francisco, CA.

Pearson, R. (1989a). Albert J. Sullivan's Theory of Public Relations Ethics. Public Relations Review, 15, 2, 52-62.

Pearson, R. (1989b). Beyond Ethical Relativism in Public Relations: Coorientation, Rules and the Idea of Communication Symmetry. In J. Grunig & L. Grunig (Eds.), Public Relations Research Annual, 1, 67-86.

Pierson, M. M. (1996). Organizational Culture at Headquarters, US Air Force Materiel Command Office of Public Affairs, News Division. Unpublished manuscript. The Ohio State University, Columbus.

Plowman, K. D. (1996). Negotiation and Two-way models in public relations. Unpublished manuscript. San Jose State University, San Jose, CA.

Pollack, E. J. (1984). An organizational analysis of four public relations models in the federal government. Unpublished master's thesis, University of Maryland, College Park.

Pratt, C. (1991). PRSA Members' Perceptions of Public Relations Ethics. Public Relations Review, 17(2), 145-159.

Sallot, L. (1993). The effect of motive, communications style, and licensing on the reputation of public relations: An impression management perspective. Unpublished doctoral dissertation, University of Florida, Gainesville.

Sawtooth Software. (1991). Adaptive Conjoint Analysis Documentation. San Diego: Author.

Scandura, T.A. & Graen, G. B. (1984). Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. Journal of Applied Psychology, 69, 428-436.

Schiemann, W. (1977). Structural and interpersonal effects on patterns of managerial communication: A longitudinal investigation. Unpublished doctoral dissertation, IL: University of Illinois.

Schiemann, W. & Graen, G. (1978). Leader-member agreement: A vertical dyad linkage approach. Journal of Applied Psychology, 63, 206-212.

Schriesheim, C.A., Neider, L.L., & Scandura, T.A. (1992). Development and Preliminary Validation of a New Scale (LMX-6) to Measure Leader-Member Exchange in Organizations. Educational and Psychological Measurement, 52, 135-147.

Schriesheim, C.A., Scandura, T.A., Eisenbach, R.J., & Neider, L.L. (1992) Validation of a new Leader-Member Exchange scale (LMX-6) using hierarchically-nested maximum likelihood confirmatory factor analysis. Educational and Psychological Measurement, 52, 983-992.

Schelling, T. (1980). The strategy of conflict. Cambridge, MA: Harvard University Press.

Seers, A., & Graen, G. (1984). The dual attachment concept: A longitudinal investigation of the combination of task characteristics and leader-members exchange. Organizational Behavior and Human Performance, 33, 283-306.

Tompkins, P. D., & Cheney, G.E. (1985). Communication and unobtrusive control. In R. M. McPhee & P. Thompson (Eds.), Organizational communication: Traditional themes and new directions (pp. 179-210). Newbury Park, CA: Sage

Turk, J. V. (1985). Public relations in state government: A typology of management styles. Journalism Quarterly, 62, 304-315.

"US Air Force Almanac" (1996). Air Force Magazine. Arlington, VA: The Air Force Association. 79, 5.

Van Dyke, M. A. (1989, June). Military Public Affairs: Is it PR management or technology? A Study of US Navy public affairs officers. Independent study paper, Syracuse University, Syracuse, NY.

Wakabayashi, M., Minami, T., Hashimoto, M., Sano, K., Graen, G., & Novak, M. (1981). Managerial career development: Japanese style. International Journal of Intercultural Relations, 4, 391-420.

Wakabayashi, M. & Graen, G. (1984). The Japanese career progress study: A seven-year follow up. Journal of Applied Psychology, 69, 603-614.

Waldron, V. R., Hunt, M. D., & Dsilva, M. (1993). Towards a threat management model of upward communication: A study of influence and maintenance tactics in the leader-member dyad. Communication Studies, 44, 254-272.

Waldron, V. R. (1991). Superior-subordinate relationships: The multi-functionality of upward maintenance tactics. Communication Monographs, 58, 289-306.



Weick, K.E. (1979). The social psychology of organizing. 2nd ed., Reading Mass: Addison-Wesley.

Wright, D. K.(1976). Social Responsibility in Public Relations: A Multi-Step Theory. Public Relations Review, 2, 24-36.

Yu, J. and Cooper, H. (1983). A Quantitative Review of Research Design Effects on Response Rates to Questionnaires. Journal of Marketing Research, 20, 1, 36-44.

## APPENDIX A

### SURVEY INSTRUMENT

This is a text version of the questions that appeared in the survey which was completed using desk-top personal computers. Bold words in all capitals represent screen names which respondents did not see. Respondents saw only one screen at a time. Respondents could exit the interview at any time and reenter later at the point where they quit. Instructions for doing this appeared at the bottom of each screen. Respondents could also go back and change their answers or read screens again by pressing the ESC key. The only exception to this feature was with the two screening questions titled "INJOB" and "SUPTIME." If respondents indicated they had been in their jobs or worked for their supervisor for less than 30 days, they saw a screen explaining that they were not eligible for the study. They then saw the final screen, asking them to return the disk, and were exited from the interview.

#### HELLO

---

Hello, and thank you for participating in the Air Force Public Affairs Decision Making Study.

It's easy to answer the questions; just follow the instructions on the screen. If there is additional "help information" available the screen tells you to press F1 to see that help information.

You can try it now if you like. Press F1.

When you are ready to see the first question, type your respondent number (written on the survey disk label) and then press ENTER:

---

**INJOB**

---

Have you worked in your current job for more than 30 days?

Press Y for YES

N for NO

---

**SUPTIME**

---

Have you worked for your current supervisor for more than 30 days?

(For this study, "supervisor" is the one person UP your chain of command to whom you report)

Press  
Y for YES

N for NO

---

**SUPPA**

---

Has your supervisor ever worked in Public Affairs?

Press  
Y for YES

N for NO

---

## ORGTYP

---

Is your unit OUTSIDE the Department of the Air Force, for example  
under a joint or combined command?

(For this survey, "unit" is the unit to which you are presently  
assigned, such as AMC headquarters, or a flying wing,  
NOT your PA office)

Press  
Y for YES

N for NO

D for Don't Know

---

## CMDLVL

---

At what level of command is your unit?

(Using the arrow keys, move the highlight bar to the  
appropriate answer. Then press ENTER. Press F1 for help.)

Air Force Headquarters, FOA or DRU

Major Command or Numbered Air Force

Wing/Center

Other

---

## TRANSIT

---

The next few questions are about your professional relationship with your supervisor. It is very important from this point forward that you give YOUR opinions and do not consult with anyone else regarding these questions. Your answers are confidential.

Please tell me how you would finish the following statements ...

Press any key to continue

---

## LMX1

---

The way my supervisor sees it, the importance of my job to his/her performance is:

(Using the arrow keys, move the highlight bar to the appropriate answer. Then press ENTER. Press F1 for help.)

Slight; it has little effect on his/her performance

Somewhat

Moderate

Great

Very Great; it is critical to his/her performance

---

## LMX2

---

My supervisor would probably say that my work goals and  
his or her goals are:

(Using the arrow keys, move the highlight bar to the  
appropriate answer. Then press ENTER. Press F1 for help.)

Opposite

Different

Unrelated

Similar

The Same

---

## LMX3

---

On my present job, this is how I feel about the way my supervisor  
and I understand each other:

(Using the arrow keys, move the highlight bar to the  
appropriate answer. Then press ENTER. Press F1 for help.)

Very Dissatisfied

Dissatisfied

Undecided or Neutral

Satisfied

Very Satisfied

---

#### **LMX4**

---

The way my supervisor sees me, he or she would probably  
say that my ability to do my job well is:

(Using the arrow keys, move the highlight bar to the  
appropriate answer. Then press ENTER. Press F1 for help.)

Poor

Below Average

Average

Good to Very Good

Exceptional

---

#### **LMX5**

---

I feel that my work goals and those of my supervisor are:

(Using the arrow keys, move the highlight bar to the  
appropriate answer. Then press ENTER. Press F1 for help.)

Opposite

Different

Unrelated

Similar

The Same

---

## LMX6

---

On my present job, this is how I feel about the way my supervisor provides help on hard problems:

(Using the arrow keys, move the highlight bar to the appropriate answer. Then press ENTER. Press F1 for help.)

Very Dissatisfied

Dissatisfied

Undecided or Neutral

Satisfied

Very Satisfied

---

## INTOACA

---

This part of the survey asks some questions dealing with choices made in Media Relations, Community Relations, and Internal Information. The scenarios are hypothetical and there is no "right" answer to any question.

Scenarios are reprinted in the survey brochure.

Any time you want to go back and review a question or change an answer, press the ESC key.

You answer each question by typing numbers on your keyboard.

---

## SWITCH1, SWITCH2, SWITCH3

---

\* Program shows the three scenarios asking conjoint analysis questions, then returns. Scenarios were shuffled when field disks were made so that each scenario had an equal chance of showing first.



WHICH WOULD YOU PREFER?

Type a number from the scale below to indicate your preference.

Send tribe a letter explaining  
your unit's training operations.

Try to get the tribe to soften  
their demands and not go public.

Be willing to adapt your unit's  
training to the tribe's needs.

OR

Ask tribe for more specifics on  
their complaints.

Try to get the tribe to drop  
their demands.

Make some concessions, if it will  
improve your unit's public image

Strongly  
Prefer

Don't  
Care

Strongly  
Prefer

Left  
Type number

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

ESC to back up

CTRL END to quit

Right

WHICH WOULD YOU PREFER?

Type a number from the scale below to indicate your preference.

Organize a meeting that fosters  
dialogue with tribal leaders.

Try to get the tribe to soften  
their demands and not go public.

Try to get the tribe to accept  
that training must go on as is.

OR

Send tribe a letter explaining  
your unit's training operations.

Temporarily move training until  
a public hearing can be held.

Make some concessions, if it will  
improve your unit's public image

Strongly  
Prefer

Don't  
Care

Strongly  
Prefer

Left  
Type number

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

ESC to back up

CTRL END to quit

Right

### Scenario 2: Community Relations

You receive a letter from a Native-American tribe opposed to your unit's training operations on public land that the tribe considers sacred. Their complaints are due to noise and environmental damage that prevents the tribe from communing with nature. The tribe is very good at rallying public support for their causes and threatens to go public with their complaints. Your unit could move its training out of the area at little cost, but some in your unit complain that giving in to the tribe's demands will set a bad precedent. They claim that other people in the training area will also make complaints and demands until all military use of the valuable area is brought to a halt.

Press any key to continue

| ESC to back up

| CTRL END to quit

Considering the scenario you have just read, which of the following courses of action would you prefer to take?

Choose the one that you would like most, then the next one you like next most. Don't enter your third choice, it's recorded automatically.

Press any key to continue

| ESC to back up

| CTRL END to quit

Type the number of your choice, assuming everything else to be equal.

- 1 Send tribe a letter explaining your unit's training operations.
- 2 Ask tribe for more specifics on their complaints.
- 3 Organize a meeting that fosters dialogue with tribal leaders.

```
Type number      |      ESC to back up      |      CTRL END to quit
```

Type the number of your choice, assuming everything else to be equal.

- 1 Try to get the tribe to drop their demands.
- 2 Try to get the tribe to soften their demands and not go public.
- 3 Temporarily move training until a public hearing can be held.

Type number | ESC to back up | CTRL END to quit

Type the number of your choice, assuming everything else to be equal.

- 1 Try to get the tribe to accept that training must go on as is.
- 2 Make some concessions, if it will improve your unit's public image
- 3 Be willing to adapt your unit's training to the tribe's needs.

Type number | ESC to back up | CTRL END to quit

Now we'd like to find out how IMPORTANT each of these  
courses of action are to you.

We'll ask you to indicate how important it would be for  
you to take the course of action indicated.

Press any key to continue | ESC to back up | CTRL END to quit

If these two actions were both acceptable, how important would THIS DIFFERENCE be to you? To answer, type a number from the scale below.

Organize a meeting that fosters dialogue with tribal leaders.

versus

Send tribe a letter explaining your unit's training operations.

Not Important At All		Somewhat Important		Very Important		Extremely Important
1	_____	2	_____	3	_____	4
Type number				ESC to back up		CTRL END to quit

Based on your responses, we'll make up some different courses of action for you to consider.

In each question we present two courses of action, each described by combinations of features. One is shown on the left of the screen, and the other on the right.

We ask you which course of action you'd prefer, and to indicate your strength of preference.

Press any key to continue | ESC to back up | CTRL END to quit

## **CLASS**

---

I need to ask a few more questions for classification purposes. Press any key to continue.

---

## **RANK**

---

Please select the choice that best describes your duty status.

(Using the arrow keys, move the highlight bar to the appropriate answer. Then press ENTER. Press F1 for help.)

Field Grade Officer

Company Grade Officer

Civilian GS-11 or Above

Civilian GS-10 or Below

Senior NCO (MSgt or higher)

Junior NCO

Junior Enlisted

---

## **GOVSERVE**

---

How many years have you served in the Federal government?

Please type the number of years from 1 - 50 and then press ENTER.

---

## **PASERVE**

---

How many years have you served in Public Affairs positions?

Please type the number of years from 1 - 50 and then press ENTER.

---

**ACCRED**

---

Do you hold any professional Public Relations accreditation?

(For example, PRSA, IABC, etc.)

Press  
Y for YES

N for NO

D for Don't Know

---

**GENDER**

---

Are you male or female?

Press  
M for Male

F for Female

---

**COMMENT**

---

I'm interested in any comments you have about this computer  
interview. Please type those comments below. Press F1 if  
you need help. Press ENTER twice when you have finished typing.

---

**BYE**

---

Thank you for your participation!

After you exit, return the diskette today to:

Capt Mike Pierson

1721 Laramie Dr

Powell, OH 43065

This address and my phone number and e-mail address are also printed on the brochure that came with this disk.

This is the final screen

Press any key to exit

---



## APPENDIX B

### CORRELATIONS WITH MAXIMUM UTILITY MODELS

#### Media Scenario

	Experience	LMX
Communication Mixed	-.0918	-.0084
Short Term High	.0106	.0122
Long Term High	.1278	.1026
Pearson's r	n = 106	

#### Community Relations Scenario

	Experience	LMX
Communication High	.1784	.1492
Short Term High	.0319	-.1670
Long Term Mixed	-.1122	-.0489
Pearson's r	n = 108	

#### Internal Scenario

	Experience	LMX
Communication Low	-.1662	.0317
Short Term High	-.0376	.0236
Long Term Mixed	.1108	-.2338*
Pearson's r	n = 103	* p < .05